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Pro Ala Gly Gln Gln Leu Asp Glu Phe Leu Gln Leu Ala Val Asp Lys
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    530                 535                 540
Leu Leu Leu Trp Val Thr Lys Ala Leu Val Leu Arg Tyr His Pro Leu
545                 550                 555                 560
Ser Ser Cys Leu Thr Ala Arg Leu Met Gly Leu Leu Ser Asp Pro Glu
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Leu Gly Pro Ala Ala Ala Asp Gly Phe Ser Leu Leu Met Ser Asp Cys
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Thr Asp Val Leu Thr Arg Ala Gly His Ala Glu Val Arg Ile Met Phe
        595                 600                 605
Arg Gln Arg Phe Phe Thr Asp Asn Val Pro Ala Leu Val Gln Gly Phe
    610                 615                 620
His Ala Ala Pro Gln Asp Val Lys Pro Asn Tyr Leu Lys Gly Leu Ser
625                 630                 635                 640
His Val Leu Asn Arg Leu Pro Lys Pro Val Leu Leu Pro Glu Leu Pro
                645                 650                 655
Thr Leu Leu Ser Leu Leu Leu Glu Ala Leu Ser Cys Pro Asp Cys Val
            660                 665                 670
Val Gln Leu Ser Thr Leu Ser Cys Leu Gln Pro Leu Leu Leu Glu Ala
        675                 680                 685
Pro Gln Val Met Ser Leu His Val Asp Thr Leu Val Thr Lys Phe Leu
    690                 695                 700
Asn Leu Ser Ser Ser Pro Ser Met Ala Val Arg Ile Ala Ala Leu Gln
705                 710                 715                 720
Cys Met His Ala Leu Thr Arg Leu Pro Thr Pro Val Leu Leu Pro Tyr
                725                 730                 735
Lys Pro Gln Val Ile Arg Ala Leu Ala Lys Pro Leu Asp Asp Lys Lys
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Arg Leu Val Arg Lys Glu Ala Val Ser Ala Arg Gly Glu Trp Phe Leu
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Leu Gly Ser Pro Gly Ser
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<213> Homo sapiens

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<222> (65)..(538)

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catgtgttaa tgttacgatg tttttaaaag ac 632

<210> 12308
<211> 158
<212> PRT
<213> Homo sapiens

<400> 12308
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Leu Ser Gly Tyr Pro Pro Phe Val Gly Arg Cys Gly Ser Asp Cys Gly
35 40 45
Trp Asp Arg Gly Glu Ala Cys Pro Ala Cys Gln Asn Met Leu Phe Glu
50 55 60
Ser Ile Gln Glu Gly Lys Tyr Glu Phe Pro Asp Lys Asp Trp Ala His
65 70 75 80
Ile Ser Cys Ala Ala Lys Asp Leu Ile Ser Lys Leu Leu Val Arg Asp
85 90 95
Ala Lys Gln Arg Leu Ser Ala Ala Gln Val Leu Gln His Pro Trp Val
100 105 110
Gln Gly Cys Ala Pro Glu Asn Thr Leu Pro Thr Pro Met Val Leu Gln
115 120 125
Arg Trp Asp Ser His Phe Leu Leu Pro Pro His Pro Cys Arg Ile His
130 135 140
Val Arg Pro Gly Gly Leu Val Arg Thr Val Thr Val Asn Glu
145 150 155

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<212> DNA
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<220>
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<222> (234)..(536)

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<211> 101
<212> PRT
<213> Homo sapiens

<400> 12310
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35 40 45
Ala Val Gly Ala Thr Ile Gly Gly Val Ala Trp Ile Gly Gly Lys Ser
50 55 60
Leu Glu Val Thr Lys Thr Ala Val Thr Thr Val Pro Ser Met Gly Ile
65 70 75 80
Gly Leu Val Lys Gly Gly Val Ser Ala Val Ala Gly Gly Val Gln Leu
85 90 95
Leu Gly Leu Leu Leu
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<210> 12311
<211> 2280
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (123)..(470)

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<211> 116
<212> PRT
<213> Homo sapiens

<400> 12312

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            20                  25                  30
Ala Ser Arg Val Ala Gly Asp Tyr Arg Cys Ala Thr Pro Cys Leu Ala
        35                  40                  45
Asn Phe Phe Val Phe Leu Val Glu Met Gly Phe His His Val Gly Gln
    50                  55                  60
Ala Gly Leu Lys Leu Leu Thr Ser Lys Asp Pro Pro Ala Leu Ala Ser
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 65                  70                  75                  80
Gln Ser Ala Gly Ile Thr Gly Val Ser His His Ala Arg Pro Ile Phe
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Phe Phe Phe Phe Phe Phe Lys Asp Val Asn Lys Leu Tyr Thr Phe Leu
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<210> 12313
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (81)..(2054)

<400> 12313

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<211> 658
<212> PRT
<213> Homo sapiens

<400> 12314
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35 40 45
Leu Ser Asn Leu Pro Gly Trp Ser Leu Lys Asp Gly Asn Ala Phe Leu
50 55 60
Asp Lys Glu Leu Lys Glu Cys Ser Gly His Val Phe Val Asp Ser Val
65 70 75 80
Pro Glu Phe Cys Leu Pro Glu Thr Glu Leu Ile Asp Leu Ser Thr Val
85 90 95
Asp Val Ile Leu Ile Ser Asn Tyr His Cys Met Met Ala Leu Pro Tyr
100 105 110
Ile Thr Glu His Thr Gly Phe Thr Gly Thr Val Tyr Ala Thr Glu Pro
115 120 125
Thr Val Gln Ile Gly Arg Leu Leu Met Glu Glu Leu Val Asn Phe Ile
130 135 140
Glu Arg Val Pro Lys Ala Gln Ser Ala Ser Leu Trp Lys Asn Lys Asp
145 150 155 160
Ile Gln Arg Leu Leu Pro Ser Pro Leu Lys Asp Ala Val Glu Val Ser
165 170 175
Thr Trp Arg Arg Cys Tyr Thr Met Gln Glu Val Asn Ser Ala Leu Ser
180 185 190
Lys Ile Gln Leu Val Gly Tyr Ser Gln Lys Ile Glu Leu Phe Gly Ala
195 200 205

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Val Gln Val Thr Pro Leu Ser Ser Gly Tyr Ala Leu Gly Ser Ser Asn
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Trp Ile Ile Gln Ser His Tyr Glu Lys Val Ser Tyr Val Ser Gly Ser
225 230 235 240
Ser Leu Leu Thr Thr His Pro Gln Pro Met Asp Gln Ala Ser Leu Lys
245 250 255
Asn Ser Asp Val Leu Val Leu Thr Gly Leu Thr Gln Ile Pro Thr Ala
260 265 270
Asn Pro Asp Gly Met Val Gly Glu Phe Cys Ser Asn Leu Ala Leu Thr
275 280 285
Val Arg Asn Gly Gly Asn Val Leu Val Pro Cys Tyr Pro Ser Gly Val
290 295 300
Ile Tyr Asp Leu Leu Glu Cys Leu Tyr Gln Tyr Ile Asp Ser Ala Gly
305 310 315 320
Leu Ser Ser Ala Pro Leu Tyr Phe Ile Ser Pro Val Ala Asn Ser Ser
325 330 335
Leu Glu Phe Ser Gln Ile Phe Ala Glu Trp Leu Cys His Asn Lys Gln
340 345 350
Ser Lys Val Tyr Leu Pro Glu Pro Pro Phe Pro His Ala Glu Leu Ile
355 360 365
Gln Thr Asn Lys Leu Lys His Tyr Pro Ser Ile His Gly Asp Phe Ser
370 375 380
Asn Asp Phe Arg Gln Pro Cys Val Val Phe Thr Gly His Pro Ser Leu
385 390 395 400
Arg Phe Gly Asp Val Val His Phe Met Glu Leu Trp Gly Lys Ser Ser
405 410 415
Leu Asn Thr Val Ile Phe Thr Glu Pro Asp Phe Ser Tyr Leu Glu Ala
420 425 430
Leu Ala Pro Tyr Gln Pro Leu Ala Met Lys Cys Ile Tyr Cys Pro Ile
435 440 445
Asp Thr Arg Leu Asn Phe Ile Gln Val Ser Lys Leu Leu Lys Glu Val
450 455 460
Gln Pro Leu His Val Val Cys Pro Glu Gln Tyr Thr Gln Pro Pro Pro
465 470 475 480
Ala Gln Ser His Arg Met Asp Leu Met Ile Asp Cys Gln Pro Pro Ala
485 490 495
Met Ser Tyr Arg Arg Ala Glu Val Leu Ala Leu Pro Phe Lys Arg Arg
500 505 510
Tyr Glu Lys Ile Glu Ile Met Pro Glu Leu Ala Asp Ser Leu Val Pro
515 520 525
Met Glu Ile Lys Pro Gly Ile Ser Leu Ala Thr Val Ser Ala Val Leu
530 535 540
His Thr Lys Asp Asn Lys His Leu Leu Gln Pro Pro Pro Arg Pro Ala
545 550 555 560
Gln Pro Thr Ser Gly Lys Lys Arg Lys Arg Val Ser Asp Asp Val Pro
565 570 575
Asp Cys Lys Val Leu Lys Pro Leu Leu Ser Gly Ser Ile Pro Val Glu
580 585 590

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Gln Phe Val Gln Thr Leu Glu Lys His Gly Phe Ser Asp Ile Lys Val
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Glu Asp Thr Ala Lys Gly His Ile Val Leu Leu Gln Glu Ala Glu Thr
    610                 615                 620
Leu Ile Gln Ile Glu Glu Asp Ser Thr His Ile Ile Cys Asp Asn Asp
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Glu Met Leu Arg Val Arg Leu Arg Asp Leu Val Leu Lys Phe Leu Gln
                645                 650                 655
Lys Phe
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<210> 12315
<211> 3115
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (8)..(1852)

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09/02/2005 09:45:05

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Cys Val Asn Cys Leu Glu Trp Asn Glu Lys Gly Asp Leu Leu Ala Ser
     50                  55                  60
Gly Ser Asp Asp Gln His Thr Ile Val Trp Asp Pro Leu His His Lys
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Lys Leu Leu Ser Met His Thr Gly His Thr Ala Asn Ile Phe Ser Val
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Leu Thr Glu Tyr Cys Gly Gln Leu Val Glu Ala Lys Cys Leu Thr Val
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Asn Pro Gln Asp Asn Asn Cys Leu Ala Val Gly Ala Ser Gly Pro Phe
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Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val Asn Met Gly
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Pro Pro Val Ala Ser Ile Leu Leu Cys Gly Ser Gly Thr Pro Asp Gln
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Leu Leu Glu Ala Ser Glu Phe Met Ala Glu Glu Ser Asn Glu Lys Phe
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Trp Gln Phe Leu Glu Thr Val Gln Glu Leu Ala Ile Tyr Lys Gln Thr
 65                  70                  75                  80
Glu Ser Asp Tyr Ser Tyr Tyr Asn Leu Ile Leu Lys Lys Ala Gly Gln
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Phe Leu Asp Asn Leu His Ile Asn Leu Leu Lys Phe Ala Phe Ser Ile
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Arg Ala Tyr Ser Pro Ala Ile Gln Met Phe Gln Gln Ile Ala Ala Asp
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Glu Pro Pro Pro Asp Gly Cys Asn Ala Phe Val Val Ile His Lys Lys
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His Thr Cys Lys Ile Asn Glu Ile Lys Lys Leu Leu Lys Lys Ala Ala
145                 150                 155                 160
Ser Arg Thr Arg Pro Tyr Leu Phe Lys Gly Asp His Lys Phe Pro Thr
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Asn Lys Glu Asn Leu Pro Val Val Ile Leu Tyr Ala Glu Met Gly Thr
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Arg Thr Phe Ser Ala Phe His Lys Val Leu Ser Glu Lys Ala Gln Asn
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Glu Glu Ile Leu Tyr Val Leu Arg His Tyr Ile Gln Lys Pro Ser Ser
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Arg Lys Met Tyr Leu Ser Gly Tyr Gly Val Glu Leu Ala Ile Lys Ser
225                 230                 235                 240
Thr Glu Tyr Lys Ala Leu Asp Asp Thr Gln Val Lys Thr Val Thr Asn
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Thr Thr Val Glu Asp Glu Thr Glu Thr Asn Glu Val Gln Gly Phe Leu
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Gln Asn Phe Pro Ile Lys Ala Arg Ser Leu Thr Arg Ile Ala Val Asn
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Tyr Thr Tyr Val Leu Asp Ile Arg His Ser Ser Ile Met Trp Ile Asn
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Thr Asn Gln Gln Tyr Leu Asn Leu Ile Ser Thr Ser Val Thr Ala Asp
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Val Glu Asp Phe Ser Thr Phe Phe Phe Leu Asp Ser Gln Asp Lys Ser
705                 710                 715                 720
Ala Val Ile Ala Lys Asn Met Tyr Tyr Leu Thr Gln Asp Asp Glu Ser
                725                 730                 735
Ile Ile Ser Ala Val Thr Leu Trp Ile Ile Ala Asp Phe Asp Lys Pro
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Gln Lys Asn Met Phe Leu Arg Ser Phe Leu Gly Gln Leu Ala Lys Glu
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Glu Ile Ala Thr Ala Ile Tyr Ser Gly Asp Lys Ile Lys Thr Phe Leu
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Ile Glu Gly Met Asp Lys Asn Ala Phe Glu Lys Lys Tyr Asn Thr Val
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Gly Val Asn Ile Phe Arg Thr His Gln Leu Phe Cys Gln Asp Val Leu
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Gly Pro Leu Asp Glu Asp Phe Tyr Ala Glu Asp Phe Tyr Leu Leu Glu
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Asn Met Gly Ile Asn Ala Asn Asn Met Ser Asp Phe Ile Met Lys Val
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0605305.0048800

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<400> 12321

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Lys Pro Tyr Val Cys Asn Glu Cys Gly Lys Ala Phe Gly Leu Lys Ser
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His Ala Gly Glu Lys Pro Tyr Glu Cys Thr Asp Cys Gly Lys Ala Phe
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His Gln Arg Thr His Ala Gly Glu Lys Pro Tyr Gly Cys Ser Glu Cys
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Gly Lys Ala Phe Ser Ser Lys Ser Tyr Leu Ile Ile His Met Arg Thr
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<400> 12324

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Phe Asp Val Val Tyr Glu Val Asp Gly Cys Pro Ala Asn Leu Leu Ser
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Ser His Arg Ser Leu Val Gln Arg Val Glu Thr Ile Ser Leu Gly Glu
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His Pro Cys Asp Arg Gly Glu Gln Val Thr Leu Phe Leu Phe Asn Asp
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Cys Leu Glu Ile Ala Arg Lys Arg His Lys Val Ile Gly Thr Phe Arg
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Ser Pro His Gly Gln Thr Arg Pro Pro Ala Ser Leu Lys His Ile His
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Lys Glu Asn Trp Leu Lys Met Leu Cys Arg His Val Ala Asn Thr Ile
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Cys Lys Ala Asp Ala Glu Asn Leu Ile Tyr Thr Ala Asp Pro Glu Ser
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Phe Glu Val Asn Thr Lys Asp Met Asp Ser Thr Leu Ser Arg Ala Ser
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0950203 • 0950203

<400> 12326

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Pro Glu Leu His Thr Lys Glu Gln Ile Leu Glu Leu Leu Val Leu Glu
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Gln Phe Leu Thr Ile Leu Pro Glu Glu Phe Gln Pro Trp Val Arg Glu
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Leu Lys Arg His Phe Arg Glu Lys Ser Gln Arg Cys Ser Asp Lys Arg
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Arg Met Asn Tyr Ser Glu Val Pro Tyr Val His Lys Lys Ser Ser Thr
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625                 630                 635                 640
Gly Phe Gly Arg Arg Ser His Leu Ala Gly His Leu Arg Leu His Ser
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Arg Glu Lys Ser His Gln Cys Arg Glu Cys Gly Glu Ile Phe Phe Gln
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Tyr Val Ser Leu Ile Glu His Gln Val Leu His Met Gly Gln Lys Asn
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Glu Lys Asn Gly Ile Cys Glu Glu Ala Tyr Ser Trp Asn Leu Thr Val
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Ile Glu Asp Lys Lys Ile Glu Leu Gln Glu Gln Pro Tyr Gln Cys Asp
705                 710                 715                 720
Ile Cys Gly Lys Ala Phe Gly Tyr Ser Ser Asp Leu Ile Gln His Tyr
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Arg Thr His Thr Ala Glu Lys Pro Tyr Gln Cys Asp Ile Cys Arg Glu
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Asn Val Gly Gln Cys Ser His Thr Lys Gln His Gln Lys Ile Tyr Ser
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Glu Ser Ala Ser Ser Ser Ile Arg Phe Ser Lys Ala Cys Leu Lys Asn
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Val Phe Ser Val Leu Leu Ile Phe Ile Tyr Leu Leu Leu Met Ala Val
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Ala Val Phe Leu Val Tyr Arg Thr Ile Thr Asp Phe Arg Glu Lys Leu
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Lys His Pro Val Met Ser Val Ser Tyr Lys Glu Val Asp Arg Tyr Asp
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Ala Pro Gly Ile Ala Leu Tyr Pro Gly Gln Ala Gln Leu Leu Ser Cys
115 120 125
Lys His His Tyr Glu Val Ile Pro Pro Leu Thr Ser Pro Gly Gln Pro
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Gly Asp Met Asn Cys Thr Thr Gln Arg Ile Asn Tyr Thr Asp Pro Phe
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Ser Ala Cys Ser Ser Trp Lys Phe Ser Gly Gly Phe Arg Thr Trp Val
225                 230                 235                 240
Lys Met Ser Leu Val Lys Thr Lys Glu Glu Asp Gly Arg Glu Ala Val
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Glu Phe Arg Gln Glu Thr Ser Val Val Asn Tyr Ile Asp Gln Arg Pro
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Ala Ala Lys Lys Ser Ala Gln Leu Phe Phe Val Val Phe Glu Trp Lys
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Asp Pro Phe Ile Gln Lys Val Gln Asp Ile Val Thr Ala Asn Pro Trp
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Trp Val Met Val Asp Pro Thr Gly Phe Arg Glu Ile Val Ala Ala Asn

US09/513,800

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Leu Phe Leu Leu Gly Phe Leu Gly Cys Cys Gly Ala Val Arg Glu Asn
 65                  70                  75                  80
Lys Cys Leu Leu Leu Phe Phe Phe Leu Phe Ile Leu Ile Ile Phe Leu
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Ala Glu Leu Ser Ala Ala Ile Leu Ala Phe Ile Phe Arg Glu Asn Leu
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Thr Arg Glu Phe Phe Thr Lys Glu Leu Thr Lys His Tyr Gln Gly Asn
        115                 120                 125
Asn Asp Thr Asp Val Phe Ser Ala Thr Trp Asn Ser Val Met Ile Thr
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Phe Gly Cys Cys Gly Val Asn Gly Pro Glu Asp Phe Lys Phe Ala Ser
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Val Phe Arg Leu Leu Thr Leu Asp Ser Glu Glu Val Pro Glu Ala Cys
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Cys Arg Arg Glu Pro Gln Ser Arg Asp Gly Val Leu Leu Ser Arg Glu
            180                 185                 190
Glu Cys Leu Leu Gly Arg Ser Leu Phe Leu Asn Lys Gln Gly Cys Tyr
        195                 200                 205
Thr Val Ile Leu Asn Thr Phe Glu Thr Tyr Val Tyr Leu Ala Gly Ala
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Leu Ala Ile Gly Val Leu Ala Ile Glu Leu Phe Ala Met Ile Phe Ala
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Met Cys Leu Phe Arg Gly Ile Gln
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (336)..(929)

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<212> PRT
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<400> 12332
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Gly His Met Ala His Leu Val Asn Ser Val Ser Asp Ile Leu Asp Ala
35 40 45
Leu Gln Arg Asp Arg Gly Leu Gly Arg Pro Arg Asn Lys Ala Asp Leu
50 55 60

0 5 0 2 0 5 4 0 5 0 - 0 2 0 2 0 0 8

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Gln Arg Ala Pro Ala Arg Gly Thr Arg Pro Arg Gly Cys Ala Thr Gly
 65                  70                  75                  80
Ser Arg Pro Arg Asp Cys Leu Asp Val Leu Leu Ser Gly Gln Gln Asp
                85                  90                  95
Asp Gly Val Tyr Ser Val Phe Pro Thr His Tyr Pro Ala Gly Phe Gln
            100                 105                 110
Val Tyr Cys Asp Met Arg Thr Asp Gly Gly Gly Trp Thr Val Phe Gln
        115                 120                 125
Arg Arg Glu Asp Gly Ser Val Asn Phe Phe Arg Gly Trp Asp Ala Tyr
    130                 135                 140
Arg Asp Gly Phe Gly Arg Leu Thr Gly Glu His Trp Leu Gly Pro Leu
145                 150                 155                 160
Asp Arg Cys Thr Leu Ser Leu Ala Leu Leu Val Pro Val Ala Pro Ser
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Pro Thr Pro Pro His Ser Phe Val Asn Val Leu His Pro Pro Val Pro
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Gly Gly Pro Thr Leu Gln
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (101)..(2035)

<400> 12333

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<210> 12334
<211> 645
<212> PRT
<213> Homo sapiens

<400> 12334

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			20					25				30			
Lys	Glu	Leu	Gly	Thr	Phe	Ala	Gln	Ser	Ser	Ile	Ala	Leu	His	His	Gln
		35					40					45			
Tyr	Asn	Pro	Lys	Phe	Gln	Thr	Leu	Phe	Gln	Pro	Cys	Asn	Leu	Met	Gly
	50					55					60				
Ala	Met	Gln	Leu	Ile	Glu	Asp	Phe	Ser	Thr	His	Val	Ser	Ile	Asp	Cys
65					70					75					80
Ser	Pro	His	Lys	Thr	Val	Lys	Lys	Thr	Ala	Asn	Glu	Phe	Pro	Cys	Leu
				85					90					95	
Pro	Lys	Gln	Val	Ala	Trp	Ile	Leu	Ala	Thr	Ser	Lys	Val	Phe	Met	Tyr
			100					105					110		
Pro	Glu	Leu	Leu	Pro	Val	Cys	Ser	Leu	Lys	Ala	Lys	Asn	Pro	Gln	Asp
		115					120					125			
Lys	Ile	Leu	Phe	Thr	Lys	Ala	Glu	Asp	Asn	Leu	Leu	Ala	Leu	Gly	Leu
	130					135					140				
Lys	His	Phe	Glu	Gly	Thr	Glu	Phe	Leu	Asn	Pro	Leu	Ile	Ser	Lys	Tyr
145					150					155					160

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Leu Asn Met Asn Arg Ala Pro Asp Asn Ile Ile Lys Phe Tyr Lys Lys
180 185 190
Thr Lys Gln Leu Pro Val Leu Gly Lys Cys Cys Glu Glu Ile Gln Pro
195 200 205
His Gln Trp Lys Pro Pro Ile Glu Arg Glu Glu His Arg Leu Pro Phe
210 215 220
Trp Leu Lys Ala Ser Leu Pro Ser Ile Gln Glu Glu Leu Arg His Met
225 230 235 240
Ala Asp Gly Ala Arg Glu Val Gly Asn Met Thr Gly Thr Thr Glu Ile
245 250 255
Asn Ser Asp Gln Gly Leu Glu Lys Asp Asn Ser Glu Leu Gly Ser Glu
260 265 270
Thr Arg Tyr Pro Leu Leu Leu Pro Lys Gly Val Val Leu Lys Leu Lys
275 280 285
Pro Val Ala Asp Arg Phe Pro Lys Lys Ala Trp Arg Gln Lys Arg Ser
290 295 300
Ser Val Leu Lys Pro Leu Leu Ile Gln Pro Ser Pro Ser Leu Gln Pro
305 310 315 320
Ser Phe Asn Pro Gly Lys Thr Pro Ala Gln Ser Thr His Ser Glu Ala
325 330 335
Pro Pro Ser Lys Met Val Leu Arg Ile Pro His Pro Ile Gln Pro Ala
340 345 350
Thr Val Leu Gln Thr Val Pro Gly Val Pro Pro Leu Gly Val Ser Gly
355 360 365
Gly Glu Ser Phe Glu Ser Pro Ala Ala Leu Pro Ala Met Pro Pro Glu
370 375 380
Ala Arg Thr Ser Phe Pro Leu Ser Glu Ser Gln Thr Leu Leu Ser Ser
385 390 395 400
Ala Pro Val Pro Lys Val Met Met Pro Ser Pro Ala Ser Ser Met Phe
405 410 415
Arg Lys Pro Tyr Val Arg Arg Arg Pro Ser Lys Arg Arg Gly Ala Arg
420 425 430
Ala Phe Arg Cys Ile Lys Pro Ala Pro Val Ile His Pro Ala Ser Val
435 440 445
Ile Phe Thr Val Pro Ala Thr Thr Val Lys Ile Val Ser Leu Gly Gly
450 455 460
Gly Cys Asn Met Ile Gln Pro Val Asn Ala Ala Val Ala Gln Ser Pro
465 470 475 480
Gln Thr Ile Pro Ile Ala Thr Leu Leu Val Asn Pro Thr Ser Phe Pro
485 490 495
Cys Pro Leu Asn Gln Pro Leu Val Ala Ser Ser Val Ser Pro Leu Ile
500 505 510
Val Ser Gly Asn Ser Val Asn Leu Pro Ile Pro Ser Thr Pro Glu Asp
515 520 525
Lys Ala His Met Asn Val Asp Ile Ala Cys Ala Val Ala Asp Gly Glu
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0950950 - 0950950

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Pro Leu Ser Ala Thr Val Phe Pro Lys Val Glu His Ser Pro Gly Pro
                565                 570                 575
Pro Pro Val Asp Lys Gln Cys Gln Glu Gly Leu Ser Glu Asn Ser Ala
            580                 585                 590
Tyr Arg Trp Thr Val Val Lys Thr Glu Glu Gly Arg Gln Ala Leu Glu
        595                 600                 605
Pro Leu Pro Gln Gly Ile Gln Glu Ser Leu Asn Asn Ser Ser Pro Gly
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<210> 12335
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (142)..(1626)

<400> 12335

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<211> 495
<212> PRT
<213> Homo sapiens

<400> 12336

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			20					25				30			
Ser	Pro	Tyr	His	Ser	Ile	Pro	Asp	Ala	Lys	Leu	Asp	Glu	Tyr	Ile	Ala
		35					40					45			
Ile	Ala	Lys	Glu	Lys	His	Gly	Tyr	Asn	Val	Glu	Gln	Ala	Leu	Gly	Met
	50					55					60				
Leu	Phe	Trp	His	Lys	His	Asn	Ile	Glu	Lys	Ser	Leu	Ala	Asp	Leu	Pro
65					70					75					80
Asn	Phe	Thr	Pro	Phe	Pro	Asp	Glu	Trp	Thr	Val	Glu	Asp	Lys	Val	Leu
				85					90					95	
Phe	Glu	Gln	Ala	Phe	Ser	Phe	His	Gly	Lys	Ser	Phe	His	Arg	Ile	Gln
			100					105					110		
Gln	Met	Leu	Pro	Asp	Lys	Thr	Ile	Ala	Ser	Leu	Val	Lys	Tyr	Tyr	Tyr
		115					120					125			
Ser	Trp	Lys	Lys	Thr	Arg	Ser	Arg	Thr	Ser	Leu	Met	Asp	Arg	Gln	Ala
	130					135					140				
Arg	Lys	Leu	Ala	Asn	Arg	His	Asn	Gln	Gly	Asp	Ser	Asp	Asp	Asp	Val
145					150					155					160
Glu	Glu	Thr	His	Pro	Met	Asp	Gly	Asn	Asp	Ser	Asp	Tyr	Asp	Pro	Lys

0050250-0050389

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        195                 200                 205
His Ser Gln Arg Ser Lys Cys Arg Pro Pro Lys Gly Met Tyr Leu Thr
    210                 215                 220
Gln Glu Asp Val Val Ala Val Ser Cys Ser Pro Asn Ala Ala Asn Thr
225                 230                 235                 240
Ile Leu Arg Gln Leu Asp Met Glu Leu Ile Ser Leu Lys Arg Gln Val
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Gln Asn Ala Lys Gln Val Asn Ser Ala Leu Lys Gln Lys Met Glu Gly
            260                 265                 270
Gly Ile Glu Glu Phe Lys Pro Pro Glu Ser Asn Gln Lys Ile Asn Ala
        275                 280                 285
Arg Trp Thr Thr Glu Glu Gln Leu Leu Ala Val Gln Gly Val Arg Lys
    290                 295                 300
Tyr Gly Lys Asp Phe Gln Ala Ile Ala Asp Val Ile Gly Asn Lys Thr
305                 310                 315                 320
Val Gly Gln Val Lys Asn Phe Phe Val Asn Tyr Arg Arg Arg Phe Asn
                325                 330                 335
Leu Glu Glu Val Leu Gln Glu Trp Glu Ala Glu Gln Gly Thr Gln Ala
            340                 345                 350
Ser Asn Gly Asp Ala Ser Thr Leu Gly Glu Glu Thr Lys Ser Ala Ser
        355                 360                 365
Asn Val Pro Ser Gly Lys Ser Thr Asp Glu Glu Glu Glu Ala Gln Thr
    370                 375                 380
Pro Gln Ala Pro Arg Thr Leu Gly Pro Ser Pro Pro Ala Pro Ser Ser
385                 390                 395                 400
Thr Pro Thr Pro Thr Ala Pro Ile Ala Thr Leu Asn Gln Pro Pro Pro
                405                 410                 415
Leu Leu Arg Pro Thr Leu Pro Ala Ala Pro Ala Leu His Arg Gln Pro
            420                 425                 430
Pro Pro Leu Gln Gln Gln Ala Arg Phe Ile Gln Pro Arg Pro Thr Leu
        435                 440                 445
Asn Gln Pro Pro Pro Pro Leu Ile Arg Pro Ala Asn Ser Met Pro Pro
    450                 455                 460
Arg Leu Asn Pro Arg Pro Val Leu Ser Thr Val Gly Gly Gln Gln Pro
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Pro Ser Leu Ile Gly Ile Gln Thr Asp Ser Gln Ser Ser Leu His
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<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 12338

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         35                  40                  45
Leu Ala Leu Phe Leu Lys Asp Asn Lys Ile Pro Ser Asp Leu Leu Asp
     50                  55                  60
Lys Glu Phe Leu Pro Ile Leu Gln Glu Glu Pro Leu Pro Pro Leu Ala
 65                  70                  75                  80
Leu Val Pro Phe Thr Glu Glu Glu Gln Arg Asn Phe Ser Met Ser Val
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Asn Ser Ala Ala Val Leu Arg Leu Thr Gly Arg Gly Gly Gly Gly Thr
            100                 105                 110
Val Val Gly Ala Pro Arg Gly Arg Ser Ser Ser Arg Gly Arg Gly Arg
        115                 120                 125
Gly Arg Gly Glu Cys Gly Phe Tyr Gln Arg Ser Phe Asp Glu Val Glu
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Gly Val Phe Gly Arg Gly Gly Gly Arg Glu Met His Arg Ser Gln Ser
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    210                 215                 220
Ser Arg Arg Asp Gly Glu Arg Trp Arg Pro His Ser Pro Asp Gly Pro
225                 230                 235                 240
Arg Ser Ala Gly Trp Arg Glu His Met Glu Arg Arg Arg Arg Phe Glu
                245                 250                 255
Phe Asp Phe Arg Asp Arg Asp Asp Glu Arg Gly Tyr Arg Arg Val Arg
            260                 265                 270
Ser Gly Ser Gly Ser Ile Asp Asp Asp Arg Asp Ser Leu Pro Glu Trp
        275                 280                 285
Cys Leu Glu Asp Ala Glu Glu Glu Met Gly Thr Phe Asp Ser Ser Gly
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Gln Glu Met Asp Phe Arg Pro Val Asp Glu Gly Glu Glu Cys Ser Asp
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Ser Glu Gly Ser His Asn Glu Glu Ala Lys Glu Pro Asp Lys Thr Asn
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Lys Lys Glu Gly Glu Lys Thr Asp Arg Val Gly Val Glu Ala Ser Glu
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Glu Thr Pro Gln Thr Ser Ser Ser Ser Ala Arg Pro Gly Thr Pro Ser
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Asp His Gln Ser Gln Glu Ala Ser Gln Phe Glu Arg Lys Asp Glu Pro
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Lys Thr Glu Gln Thr Glu Lys Ala Glu Glu Glu Thr Arg Met Glu Asn
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Ser Leu Pro Ala Lys Val Pro Ser Arg Gly Asp Glu Met Val Ala Asp
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Val Gln Gln Pro Leu Ser Gln Ile Pro Ser Asp Thr Ala Ser Pro Leu
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465                 470                 475                 480
Glu Pro Asp Asp Glu Glu Gly Leu Lys His Leu Glu Gln Gln Ala Glu
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Ala Ser Lys Leu Gln Glu His Arg Ala Lys Gly Val Ser Ile Pro Leu
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Met His Glu Ala Met Gln Lys Trp Tyr Tyr Lys Asp Pro Gln Gly Glu
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660 665 670
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Gly Ser Ile Trp Glu Leu Gln Pro Thr Ala Ser Gln Pro Thr Val Trp
690 695 700
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Gln Gln Gln Gln Gln Leu Ala Gln Met Lys Leu Pro Ser Ser Ser Thr
915 920 925
Trp Gly Gln Gln Ser Asn Thr Thr Ala Cys Gln Ser Gln Ala Thr Leu
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0505050-050505

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Arg Glu Glu Gln Arg Arg Gln Gln Arg Glu Leu Met Lys Ala Leu Gln
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Gln Gln Gln Gln Gln Gln Gln Gln Lys Leu Ser Gly Trp Gly Asn Val
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Ser Lys Pro Ser Gly Thr Thr Lys Ser Leu Leu Glu Ile Gln Gln Glu
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Glu Ala Arg Gln Met Gln Lys Gln Gln Gln Gln Gln Gln Gln His Gln
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Gln Pro Asn Arg Ala Arg Asn Asn Thr His Ser Asn Leu His Thr Ser
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Ile Gly Asn Ser Val Trp Gly Ser Ile Asn Thr Gly Pro Pro Asn Gln
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Trp Ala Ser Asp Leu Val Ser Ser Ile Trp Ser Asn Ala Asp Thr Lys
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Asn Ser Asn Met Gly Phe Trp Asp Asp Ala Val Lys Glu Val Gly Pro
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<213> Homo sapiens

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35 40 45
Pro Leu Met His Ala Ala Tyr Lys Gly Lys Leu Asp Met Cys Lys Leu
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Leu Leu Arg His Gly Ala Asp Val Asn Cys His Gln His Glu His Gly
65 70 75 80
Tyr Thr Ala Leu Met Phe Ala Ala Leu Ser Gly Asn Lys Asp Ile Thr
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    130                 135                 140
Thr Lys Pro Gln Gly Leu Gly Lys Glu Pro Lys Leu Pro Pro Lys Leu
145                 150                 155                 160
Ala Gly Pro Leu His Lys Ile Ile Thr Thr Thr Asn Leu His Pro Val
                165                 170                 175
Lys Ile Val Met Leu Val Asn Glu Asn Pro Leu Leu Thr Glu Glu Ala
            180                 185                 190
Ala Leu Asn Lys Cys Tyr Arg Val Met Asp Leu Ile Cys Glu Lys Cys
        195                 200                 205
Met Lys Gln Arg Asp Met Asn Glu Val Leu Ala Met Lys Met His Tyr
    210                 215                 220
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225                 230                 235                 240
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Asp Gly Phe Pro Val Tyr Gln Glu Lys Ile Ile Arg Glu Ser Ile Arg
            260                 265                 270
Lys Phe Pro Tyr Cys Glu Ala Thr Leu Leu Gln Gln Leu Val Arg Ser
        275                 280                 285
Ile Ala Pro Val Glu Ile Gly Ser Asp Pro Thr Ala Phe Ser Val Leu
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Thr Gln Ala Ile Thr Gly Gln Val Gly Phe Val Asp Val Glu Leu Cys
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<212> PRT
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35 40 45
Val Val Val Thr Asn Leu Asn Gly His Thr Ala Arg Val Asn Cys Ile
50 55 60
Gln Trp Ile Cys Lys Gln Asp Gly Ser Pro Ser Thr Glu Leu Val Ser
65 70 75 80
Gly Gly Ser Asp Asn Gln Val Ile His Trp Glu Ile Glu Asp Asn Gln
85 90 95
Leu Leu Lys Ala Val His Leu Gln Gly His Glu Gly Pro Val Tyr Ala
100 105 110
Val His Ala Val Tyr Gln Arg Arg Thr Ser Asp Pro Ala Leu Cys Thr
115 120 125
Leu Ile Val Ser Ala Ala Ala Asp Ser Ala Val Arg Leu Trp Ser Lys
130 135 140
Lys Gly Pro Glu Val Met Cys Leu Gln Thr Leu Asn Phe Gly Asn Gly
145 150 155 160
Phe Ala Leu Ala Leu Cys Leu Ser Phe Leu Pro Asn Thr Asp Val Pro
165 170 175
Ile Leu Ala Cys Gly Asn Asp Asp Cys Arg Ile His Ile Phe Ala Gln
180 185 190
Gln Asn Asp Gln Phe Gln Lys Val Leu Ser Leu Cys Gly His Glu Asp
195 200 205
Trp Ile Arg Gly Val Glu Trp Ala Ala Phe Gly Arg Asp Leu Phe Leu
210 215 220
Ala Ser Cys Ser Gln Asp Cys Leu Ile Arg Ile Trp Lys Leu Tyr Ile
225 230 235 240
Lys Ser Thr Ser Leu Glu Thr Gln Asp Asp Asp Asn Ile Arg Leu Lys
245 250 255
Glu Asn Thr Phe Thr Ile Glu Asn Glu Ser Val Lys Ile Ala Phe Ala
260 265 270
Val Thr Leu Glu Thr Val Leu Ala Gly His Glu Asn Trp Val Asn Ala
275 280 285
Val His Trp Gln Pro Val Phe Tyr Lys Asp Gly Val Leu Gln Gln Pro
290 295 300
Val Arg Leu Leu Ser Ala Ser Met Asp Lys Thr Met Ile Leu Trp Ala
305 310 315 320
Pro Asp Glu Glu Ser Gly Val Trp Leu Glu Gln Val Arg Val Gly Glu
325 330 335
Val Gly Gly Asn Thr Leu Gly Phe Tyr Asp Cys Gln Phe Asn Glu Asp
340 345 350
Gly Ser Met Ile Ile Ala His Ala Phe His Gly Ala Leu His Leu Trp
355 360 365
Lys Gln Asn Thr Val Asn Pro Arg Glu Trp Thr Pro Glu Ile Val Ile
370 375 380
Ser Gly His Phe Asp Gly Val Gln Asp Leu Val Trp Asp Pro Glu Gly
385 390 395 400

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Glu Phe Ile Ile Thr Val Gly Thr Asp Gln Thr Thr Arg Leu Phe Ala
405 410 415
Pro Trp Lys Arg Lys Asp Gln Ser Gln Val Thr Trp His Glu Ile Ala
420 425 430
Arg Pro Gln Ile His Gly Tyr Asp Leu Lys Cys Leu Ala Met Ile Asn
435 440 445
Arg Phe Gln Phe Val Ser Gly Ala Asp Glu Lys Val Leu Arg Val Phe
450 455 460
Ser Ala Pro Arg Asn Phe Val Glu Asn Phe Cys Ala Ile Thr Gly Gln
465 470 475 480
Ser Leu Asn His Val Leu Cys Asn Gln Asp Ser Asp Leu Pro Glu Gly
485 490 495
Ala Thr Val Pro Ala Leu Gly Leu Ser Asn Lys Ala Val Phe Gln Gly
500 505 510
Asp Ile Ala Ser Gln Pro Ser Asp Glu Glu Glu Leu Leu Thr Ser Thr
515 520 525
Gly Phe Glu Tyr Gln Gln Val Ala Phe Gln Pro Ser Ile Leu Thr Glu
530 535 540
Pro Pro Thr Glu Asp His Leu Leu Gln Asn Thr Leu Trp Pro Glu Val
545 550 555 560
Gln Lys Leu Tyr Gly His Gly Tyr Glu Ile Phe Cys Val Thr Cys Asn
565 570 575
Ser Ser Lys Thr Leu Leu Ala Ser Ala Cys Lys Ala Ala Lys Lys Glu
580 585 590
His Ala Ala Ile Ile Leu Trp Asn Thr Thr Ser Trp Lys Gln Val Gln
595 600 605
Asn Leu Val Phe His Ser Leu Thr Val Thr Gln Met Ala Phe Ser Pro
610 615 620
Asn Glu Lys Phe Leu Leu Ala Val Ser Arg Asp Arg Thr Trp Ser Leu
625 630 635 640
Trp Lys Lys Gln Asp Thr Ile Ser Pro Glu Phe Glu Pro Val Phe Ser
645 650 655
Leu Phe Ala Phe Thr Asn Lys Ile Thr Ser Val His Ser Arg Ile Ile
660 665 670
Trp Ser Cys Asp Trp Ser Pro Asp Ser Lys Tyr Phe Phe Thr Gly Ser
675 680 685
Arg Asp Lys Lys Val Val Val Trp Gly Glu Cys Asp Ser Thr Asp Asp
690 695 700
Cys Ile Glu His Asn Ile Gly Pro Cys Ser Ser Val Leu Asp Val Gly
705 710 715 720
Gly Ala Val Thr Ala Val Ser Val Cys Pro Val Leu His Pro Ser Gln
725 730 735
Arg Tyr Val Val Ala Val Gly Leu Glu Cys Gly Lys Ile Cys Leu Tyr
740 745 750
Thr Trp Lys Lys Thr Asp Gln Val Pro Glu Ile Asn Asp Trp Thr His
755 760 765
Cys Val Glu Thr Ser Gln Ser Gln Ser His Thr Leu Ala Ile Arg Lys
770 775 780

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Leu Cys Trp Lys Asn Cys Ser Gly Lys Thr Glu Gln Lys Glu Ala Glu
785 790 795 800
Gly Ala Glu Trp Leu His Phe Ala Ser Cys Gly Glu Asp His Thr Val
805 810 815
Lys Ile His Arg Val Asn Lys Cys Ala Leu
820 825

<210> 12343
<211> 2835
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (723)..(1022)

<400> 12343
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gcaccgtggt caccattaag caggtgctca ccgcgccagg ctcggcgggg cagccccggt 180
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ccaacgccat gctggctgtg aagcatgggg tgctctacgt ctatgggggc atgtttgagg 300
ccggcgaccg ccaggtcacc ctcagcgacc tgcactgcct ggacctgcac aggatggagg 360
cgtggaaggc cttggtggag atggacccag aaactcagga gtggctggag gagacggact 420
cggaagagga cagtgaggag gttgagggcg ccgagggtgg ggtcgacgac gaagacagcg 480
gagaggagag cggtgcggag gactgaggct gtgacaaacc ctgtgcccac gctgcctcca 540
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ctgggggaga catgccctgg ccaccagtgg tgagccagcg agacaggacc ccacgcgcgc 660
tgacccgggg acgccatgga actcactcgc gactcctgca cgcgcgctga cccgggggacg 720
ccatggaact cactcgcgat tcctgctcac agcacgtttc ctgctcggaa accaggagag 780
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cgcacacggc ccaggagcgc cagcagcttg gggaccacca caggcctcag ggtctcttca 960
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cctgaactgc aaaagtatga aaaacatttc atttccctcg agttctccac actttaggtc 1080
tgcagcgcct tgggggtgac tgatggccct ccgtgagacg cggtggccat gtgcttctac 1140
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catggcctgg cttggggcct tacaggggag cgagctgagt gaatgcaggg gagggcccgt 1260
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acctcaggtg atccacctgc cttggcctcc caaagtgctg ggattacagg catgagccac 1560
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ggcattgcat gcctgatctg tatctttggg aatcctgtga ggtaatggtt ctagatccaa 1680
aagaatggat aaagagactg tttcagttcc cgaaattatc gaggcacatt ctgtgcgcta 1740
ctgaacttca gaaagcacca gtccatccag tgtgcagagg ctggtaagta aaacaggcca 1800

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ggaagtggct ttgccctctg ccctcgctgc tggaaggcaa ggggccgttc tcgccttggt 2400
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cgctcaggga cacctgcctc tgtgcatgtc tcatggtgtg aatgtgtttc ctgctcacag 2520
gtaccgtttt gtgtcatgca gttactggaa tgtacaaaag cagctgtgat ctttgtgaga 2580
gctgcacaga gcaggagtct gagagctgca cagagcagga gtctttattt ggttcacttc 2640
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ctttagaaag cgacattatc agaaatgtat gaccttcagt cctccctccc tctcctatgc 2760
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actgaattta actgg 2835

<210> 12344
<211> 100
<212> PRT
<213> Homo sapiens

<400> 12344
Met Glu Leu Thr Arg Asp Ser Cys Ser Gln His Val Ser Cys Ser Glu
1 5 10 15
Thr Arg Arg Ala Ser Thr Cys Arg Leu Ala Leu Ser Thr His Pro Phe
20 25 30
Arg Cys Leu Leu Gln Ser Val Cys Arg Thr Tyr Glu Val Lys Ser Ala
35 40 45
Leu Ser His Glu Asp Cys Glu Gly Ser Cys His Pro His Thr Ala Gln
50 55 60
Glu Arg Gln Gln Leu Gly Asp His His Arg Pro Gln Gly Leu Phe Ser
65 70 75 80
Pro Thr Gly Pro Ala Val Asp Lys Thr Ser Arg Gly Arg Ser Lys Gly
85 90 95
Gln Pro Arg Thr
100

<210> 12345
<211> 1707
<212> DNA
<213> Homo sapiens

<220>

09502950.0250

0950350-040900

<221> CDS
<222> (188)..(1456)

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aggagcttcg tgttgtgggt ctgctaaccc gtacgtttcc gtgggcaagt cgtgtgtact 180
cctcgccatg gctcagctcc aaacacgctt ctacactgat aacaagaaat atgccgtaga 240
tgatgttccc ttctcaatcc ctgctgcctc tgaaattgcc gaccttagta acatcatcaa 300
taaactacta aaggacaaaa atgagttcca caaacatgtg gagtttgatt tccttattaa 360
gggccagttt ctgcgaatgc ccttggacaa acacatggaa atggagaacg tctcatcaga 420
agaagttgtg gaaatagaat acgtggagaa gtatactgca ccccagccag agcaatgcat 480
gttccatgat gactggatca gttcaattaa aggggcagag gaatggatct tgactggttc 540
ttatgataag acttctcgga tctggtcctt ggaaggaaag tcaataatga caattgtggg 600
acatacggat gttgtaaaag atgtggcctg ggtgaaaaaa gatagtttgt cctgcttatt 660
attgagtgct tctatggatc agactattct cttatgggag tggaatgtag agagaaacaa 720
agtgaaagcc ctacactgct gtagaggtca tgctggaagt gtagattcta tagctgttga 780
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agtccctaca gatgaagaag atgaaatgga ggagtccaca aatcgaccaa gaaagaaaca 900
gaagacagaa cagttgggac taacaaggac tcccatagtg accctctctg gccacatgga 960
ggcagtttcc tcagttctgt ggtcagatgc tgaagaaatc tgcagtgcat cttgggacca 1020
tacaattaga gtgtgggatg ttgagtctgg cagtcttaag tcaactttga caggaaataa 1080
agtgtttaat tgtatttcct attctccact ttgtaaacgt ttagcatctg gaagcacaga 1140
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aacgtcacat actggttggg tgacatcagt aaaatggtct cctacccatg aacagcagct 1260
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gctacttctg agtggaggag cagacaataa attgtattcc tacagatatt cacctaccac 1440
ttcccatgtt ggggcatgaa agtgaacaat aatttgacta tagagattat ttctgtaaat 1500
gaaattggta gagaaccatg aaattacata gatgcagatg cagaaagcag ccttttgagg 1560
tttatataat gttttcaccc ttcataacag ctaacgtatc actttttctt attttgtatt 1620
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ttgaaattaa actgagtttt acatttc 1707

<210> 12346
<211> 423
<212> PRT
<213> Homo sapiens

<400> 12346
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Val Asp Asp Val Pro Phe Ser Ile Pro Ala Ala Ser Glu Ile Ala Asp
20 25 30
Leu Ser Asn Ile Ile Asn Lys Leu Leu Lys Asp Lys Asn Glu Phe His
35 40 45
Lys His Val Glu Phe Asp Phe Leu Ile Lys Gly Gln Phe Leu Arg Met

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     50                  55                  60
Pro Leu Asp Lys His Met Glu Met Glu Asn Val Ser Ser Glu Glu Val
 65                  70                  75                  80
Val Glu Ile Glu Tyr Val Glu Lys Tyr Thr Ala Pro Gln Pro Glu Gln
                 85                  90                  95
Cys Met Phe His Asp Asp Trp Ile Ser Ser Ile Lys Gly Ala Glu Glu
            100                 105                 110
Trp Ile Leu Thr Gly Ser Tyr Asp Lys Thr Ser Arg Ile Trp Ser Leu
        115                 120                 125
Glu Gly Lys Ser Ile Met Thr Ile Val Gly His Thr Asp Val Val Lys
    130                 135                 140
Asp Val Ala Trp Val Lys Lys Asp Ser Leu Ser Cys Leu Leu Leu Ser
145                 150                 155                 160
Ala Ser Met Asp Gln Thr Ile Leu Leu Trp Glu Trp Asn Val Glu Arg
                165                 170                 175
Asn Lys Val Lys Ala Leu His Cys Cys Arg Gly His Ala Gly Ser Val
            180                 185                 190
Asp Ser Ile Ala Val Asp Gly Ser Gly Thr Lys Phe Cys Ser Gly Ser
        195                 200                 205
Trp Asp Lys Met Leu Lys Ile Trp Ser Thr Val Pro Thr Asp Glu Glu
    210                 215                 220
Asp Glu Met Glu Glu Ser Thr Asn Arg Pro Arg Lys Lys Gln Lys Thr
225                 230                 235                 240
Glu Gln Leu Gly Leu Thr Arg Thr Pro Ile Val Thr Leu Ser Gly His
                245                 250                 255
Met Glu Ala Val Ser Ser Val Leu Trp Ser Asp Ala Glu Glu Ile Cys
            260                 265                 270
Ser Ala Ser Trp Asp His Thr Ile Arg Val Trp Asp Val Glu Ser Gly
        275                 280                 285
Ser Leu Lys Ser Thr Leu Thr Gly Asn Lys Val Phe Asn Cys Ile Ser
    290                 295                 300
Tyr Ser Pro Leu Cys Lys Arg Leu Ala Ser Gly Ser Thr Asp Arg His
305                 310                 315                 320
Ile Arg Leu Trp Asp Pro Arg Thr Lys Asp Gly Ser Leu Val Ser Leu
                325                 330                 335
Ser Leu Thr Ser His Thr Gly Trp Val Thr Ser Val Lys Trp Ser Pro
            340                 345                 350
Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val Lys
        355                 360                 365
Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala Ala
    370                 375                 380
His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu Leu
385                 390                 395                 400
Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser Pro
                405                 410                 415
Thr Thr Ser His Val Gly Ala
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<210> 12347
<211> 2543
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (77)..(1957)

<400> 12347
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aattccaggt ggcacaacgg tgctggtgga gctgactccc gacatccata tctgcggcat 180
ctgcaagcag cagtttaaca acctggatgc ctttgtagct cacaagcaaa gtggctgcca 240
gctgacaggc acatccgcag cagcccccag cacggtccag tttgtatcgg aggaaacagt 300
gcctgccacc cagactcaga ccaccaccag aaccatcacc tcggagaccc agacaatcac 360
aggttgccaa ttcaagactg cttatggcat gaaggacatg gagcggcatt taaaaattca 420
cacgggagac aaaccccata agtgtgaagt ctgtggcaag tgctttagcc ggaaagacaa 480
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gcccttcaaa tgccagatct gcccctacgc cagccgcaac tccagccagc tcactgtcca 660
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cgagttctgc aatgtccgct gcaccatgaa ggggaacctc aagtcgcaca tccgtatcaa 840
gcacagcggg aataacttca agtgtcctca ttgcgacttc ctgggtgaca gcaaagccac 900
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taatgttttc tttgttttgt tttgtttttg agacggagtc tcgctctgtt tcccaggctg 2100
gagtgcagtg gcgctatctt ggctcactgc aacgtccgcc tcccaggttc aagcgattct 2160
catgcctcag ccctccgagt agctgggacc acaggtgtac gacatcatga ctggctaatt 2220

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<211> 627
<212> PRT
<213> Homo sapiens

<400> 12348
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Pro Gly Gly Thr Thr Val Leu Val Glu Leu Thr Pro Asp Ile His Ile
20 25 30
Cys Gly Ile Cys Lys Gln Gln Phe Asn Asn Leu Asp Ala Phe Val Ala
35 40 45
His Lys Gln Ser Gly Cys Gln Leu Thr Gly Thr Ser Ala Ala Ala Pro
50 55 60
Ser Thr Val Gln Phe Val Ser Glu Glu Thr Val Pro Ala Thr Gln Thr
65 70 75 80
Gln Thr Thr Thr Arg Thr Ile Thr Ser Glu Thr Gln Thr Ile Thr Gly
85 90 95
Cys Gln Phe Lys Thr Ala Tyr Gly Met Lys Asp Met Glu Arg His Leu
100 105 110
Lys Ile His Thr Gly Asp Lys Pro His Lys Cys Glu Val Cys Gly Lys
115 120 125
Cys Phe Ser Arg Lys Asp Lys Leu Lys Thr His Met Arg Cys His Thr
130 135 140
Gly Val Lys Pro Tyr Lys Cys Lys Thr Cys Asp Tyr Ala Ala Ala Asp
145 150 155 160
Ser Ser Ser Leu Asn Lys His Leu Arg Ile His Ser Asp Glu Arg Pro
165 170 175
Phe Lys Cys Gln Ile Cys Pro Tyr Ala Ser Arg Asn Ser Ser Gln Leu
180 185 190
Thr Val His Leu Arg Ser His Thr Gly Asp Ala Pro Phe Gln Cys Trp
195 200 205
Leu Cys Ser Ala Lys Phe Lys Ile Ser Ser Asp Leu Lys Arg His Met
210 215 220
Arg Val His Ser Gly Glu Lys Pro Phe Lys Cys Glu Phe Cys Asn Val
225 230 235 240
Arg Cys Thr Met Lys Gly Asn Leu Lys Ser His Ile Arg Ile Lys His
245 250 255
Ser Gly Asn Asn Phe Lys Cys Pro His Cys Asp Phe Leu Gly Asp Ser
260 265 270

0050050-0050050

Lys Ala Thr Leu Arg Lys His Ser Arg Val His Gln Ser Glu His Pro
275 280 285
Glu Lys Cys Ser Glu Cys Ser Tyr Ser Cys Ser Ser Lys Ala Ala Leu
290 295 300
Arg Ile His Glu Arg Ile His Cys Thr Asp Arg Pro Phe Lys Cys Asn
305 310 315 320
Tyr Cys Ser Phe Asp Thr Lys Gln Pro Ser Asn Leu Ser Lys His Met
325 330 335
Lys Lys Phe His Gly Asp Met Val Lys Thr Glu Ala Leu Glu Arg Lys
340 345 350
Asp Thr Gly Arg Gln Ser Ser Arg Gln Val Ala Lys Leu Asp Ala Lys
355 360 365
Lys Ser Phe His Cys Asp Ile Cys Asp Ala Ser Phe Met Arg Glu Asp
370 375 380
Ser Leu Arg Ser His Lys Arg Gln His Ser Glu Tyr Ser Glu Ser Lys
385 390 395 400
Asn Ser Asp Val Thr Val Leu Gln Phe Gln Ile Asp Pro Ser Lys Gln
405 410 415
Pro Ala Thr Pro Leu Thr Val Gly His Leu Gln Val Pro Leu Gln Pro
420 425 430
Ser Gln Val Pro Gln Phe Ser Glu Gly Arg Val Lys Ile Ile Val Gly
435 440 445
His Gln Val Pro Gln Ala Asn Thr Ile Val Gln Ala Ala Ala Ala Ala
450 455 460
Val Asn Ile Val Pro Pro Ala Leu Val Ala Gln Asn Pro Glu Glu Leu
465 470 475 480
Pro Gly Asn Ser Arg Leu Gln Ile Leu Arg Gln Val Ser Leu Ile Ala
485 490 495
Pro Pro Gln Ser Ser Arg Cys Pro Ser Glu Ala Gly Ala Met Thr Gln
500 505 510
Pro Ala Val Leu Leu Thr Thr His Glu Gln Thr Asp Gly Ala Thr Leu
515 520 525
His Gln Thr Leu Ile Pro Thr Ala Ser Gly Gly Pro Gln Glu Gly Ser
530 535 540
Gly Asn Gln Thr Phe Ile Thr Ser Ser Gly Ile Thr Cys Thr Asp Phe
545 550 555 560
Glu Gly Leu Asn Ala Leu Ile Gln Glu Gly Thr Ala Glu Val Thr Val
565 570 575
Val Ser Asp Gly Gly Gln Asn Ile Ala Val Ala Thr Thr Ala Pro Pro
580 585 590
Val Phe Ser Ser Ser Ser Gln Gln Glu Leu Pro Lys Gln Thr Tyr Ser
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610 615 620
Ile Pro Asp
625

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<210> 12349
<211> 3655
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (128)..(1210)

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85 90 95
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Met Lys Asn Leu Leu Lys Val Gly Gly Ile Leu Val Met Pro Leu Glu
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Glu Lys Leu Thr Lys Ile Thr Arg Thr Gly Pro Ser Ala Trp Glu Thr
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Lys Lys Ile Leu Ala Val Ser Phe Ala Pro Leu Ile Gln Pro Cys His
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Ser Glu Ser Gly Lys Ser Arg Leu Val Gln Leu Pro Pro Val Ala Val
225                 230                 235                 240
Arg Ser Leu Gln Asp Leu Ala Arg Ile Ala Ile Arg Gly Thr Ile Lys
                245                 250                 255
Lys Ile Ile His Gln Glu Thr Val Ser Lys Asn Gly Asn Gly Leu Lys
            260                 265                 270
Asn Thr Pro Arg Phe Lys Arg Arg Arg Val Arg Arg Arg Arg Met Glu
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Leu Thr Leu Ala Ala Asp Leu Ser Ser Ala Thr Leu Asp Ile Ser Lys
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Gln Trp Ser Asn Val Phe Asn Ile Leu Arg Glu Asn Asp Phe Glu Pro
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Lys Phe Leu Cys Glu Val Lys Leu Ala Phe Lys Cys Asp Gly Glu Ile
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Lys Thr Phe Ser Asp Leu Gln Ser Leu Arg Lys Phe Ala Ser Gln Lys
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Ser Ser Met Lys Glu Leu Leu Lys Asp Val Leu Pro Gln Lys Glu Glu
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Ile Asn Gln Gly Gly Arg Lys Tyr Gly Ile Gln Glu Lys Arg Asp Lys
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Thr Leu Ile Asp Ser Lys His Arg Ala Gly Glu Ile Thr Ser Asp Gly
225                 230                 235                 240
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Met Lys Asn Leu Glu Thr Gln Glu Glu Glu Phe Ser Glu Leu Glu Glu
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Glu Glu Glu Gln Thr Ser Glu Gln Asp Ser Thr Phe Gln Gly His Thr
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Leu Val Asp Ala Lys His Glu Val Glu Ile Thr Ser Asp Gly Met Glu
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Thr Thr Phe Ile Asp Ser Val Glu Asp Ser Glu Ser Glu Glu Glu Glu
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Glu Gly Lys Ser Ser Glu Thr Gly Lys Val Lys Thr Thr Ser Leu Thr
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US 2005/0059005 A1

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<212> PRT
<213> Homo sapiens

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09/02/2004 09:56:03

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Lys Thr Glu Lys Ile Tyr Asp Asp His Arg Lys Phe Leu Leu Arg Ile
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Leu Met Ala Val Asn Val Thr Tyr Ser Ser Thr Gly Gln Ile Ala Ser
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Ile Gln Arg Gly Thr Thr Ser Glu Lys Val Asp Tyr Asp Gly Gln Gly
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Arg Ile Val Ser Arg Val Phe Ala Asp Gly Lys Thr Trp Ser Tyr Thr
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Arg Arg Val Leu Phe Lys Tyr Arg Arg Gln Thr Arg Leu Ser Glu Ile
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Leu Tyr Asp Ser Thr Arg Val Ser Phe Thr Tyr Asp Glu Thr Ala Gly
225 230 235 240
Val Leu Lys Thr Val Asn Leu Gln Ser Asp Gly Phe Ile Cys Thr Ile
245 250 255
Arg Tyr Arg Gln Ile Gly Pro Leu Ile Asp Arg Gln Ile Phe Arg Phe
260 265 270
Ser Glu Asp Gly Met Val Asn Ala Arg Phe Asp Tyr Ser Tyr Asp Asn
275 280 285
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Pro Ile Asp Leu Tyr Gln Phe Asp Asp Ile Ser Gly Lys Val Glu Gln
305 310 315 320
Phe Gly Lys Phe Gly Val Ile Tyr Tyr Asp Ile Asn Gln Ile Ile Ser
325 330 335
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Lys Glu Ile Gln Tyr Glu Ile Phe Arg Ser Leu Met Tyr Trp Ile Thr
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Ile Gln Tyr Asp Asn Met Gly Arg Val Thr Lys Arg Glu Ile Lys Ile
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0003420-960509

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Arg Gly Thr Glu Ile Phe Glu Tyr Ser Ser Lys Gly Leu Leu Thr Arg
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Val Tyr Ser Lys Gly Ser Gly Trp Thr Val Ile Tyr Arg Tyr Asp Gly
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Leu Gly Arg Arg Val Ser Ser Lys Thr Ser Leu Gly Gln His Leu Gln
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Phe Phe Tyr Ala Asp Leu Thr Tyr Pro Thr Arg Ile Thr His Val Tyr
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His Leu Phe Ala Met Glu Ile Ser Ser Gly Asp Glu Phe Tyr Ile Ala
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Asp Pro Leu Thr Lys Leu Ile His Phe Gly Glu Arg Asp Tyr Asp Ile
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Gly Lys Asp Pro Ala Pro Phe Asn Leu Tyr Met Phe Arg Asn Asn Asn
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Pro Ala Ser Lys Ile His Asp Val Lys Asp Tyr Ile Thr Asp Val Asn
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Ser Trp Leu Val Thr Phe Gly Phe His Leu His Asn Ala Ile Pro Gly
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Phe Pro Val Pro Lys Phe Asp Leu Thr Glu Pro Ser Tyr Glu Leu Val
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Lys Ser Gln Gln Trp Asp Asp Ile Pro Pro Ile Phe Gly Val Gln Gln
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Gln Val Ala Arg Gln Ala Lys Ala Phe Leu Ser Leu Gly Lys Met Ala
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Glu Val Gln Val Ser Arg Arg Arg Ala Gly Gly Ala Gln Ser Trp Leu
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Trp Phe Ala Thr Val Lys Ser Leu Ile Gly Lys Gly Val Met Leu Ala
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Val Ser Gln Gly Arg Val Gln Thr Asn Val Leu Asn Ile Ala Asn Glu
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Asp Cys Ile Lys Val Ala Ala Val Leu Asn Asn Ala Phe Tyr Leu Glu
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Thr Thr Thr Pro Glu Ser Asp Leu Gly Thr Leu Arg Leu Thr Ser Gly
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Arg Lys Ala Leu Glu Asn Gly Ile Asn Val Thr Val Ser Gln Ser Thr
        835                 840                 845
Thr Val Val Asn Gly Arg Thr Arg Arg Phe Ala Asp Val Glu Met Gln
    850                 855                 860
Phe Gly Ala Leu Ala Leu His Val Arg Tyr Gly Met Thr Leu Asp Glu
865                 870                 875                 880
Glu Lys Ala Arg Ile Leu Glu Gln Ala Arg Gln Arg Ala Leu Ala Arg
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Ala Trp Ala Arg Glu Gln Gln Arg Val Arg Asp Gly Glu Glu Gly Ala
            900                 905                 910
Arg Leu Trp Thr Glu Gly Glu Lys Arg Gln Leu Leu Ser Ala Gly Lys
        915                 920                 925
Val Gln Gly Tyr Asp Gly Tyr Tyr Val Leu Ser Val Glu Gln Tyr Pro
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Glu Leu Ala Asp Ser Ala Asn Asn Ile Gln Phe Leu Arg Gln Ser Glu
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Ile Gly Arg Arg
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<213> Homo sapiens

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<222> (170)..(1372)

<400> 12356

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<212> PRT
<213> Homo sapiens

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65                  70                  75                  80
Leu Asp Lys Ile Gln Ser Ser His Asn Phe Gln Leu Glu Ser Val Asn
                85                  90                  95
Lys Leu Tyr Gln Asp Glu Lys Ala Val Leu Val Asn Asn Ile Thr Thr
            100                 105                 110
Gly Glu Arg Leu Ile Arg Val Leu Gln Asp Gln Leu Lys Thr Leu Gln
        115                 120                 125
Arg Asn Tyr Gly Arg Leu Gln Gln Asp Val Leu Gln Phe Gln Lys Asn
    130                 135                 140
Gln Thr Asn Leu Glu Arg Lys Phe Ser Tyr Asp Leu Ser Gln Cys Ile
145                 150                 155                 160
Asn Gln Met Lys Glu Val Lys Glu Gln Cys Glu Glu Arg Ile Glu Glu
                165                 170                 175
Val Thr Lys Lys Gly Asn Glu Ala Val Ala Ser Arg Asp Leu Ser Glu
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Arg Leu Gln Ala Ala Gly Leu Pro His Thr Glu Val Pro Gln Gly Lys
    210                 215                 220
Gly Asn Val Leu Gly Asn Ser Lys Ser Gln Thr Pro Ala Pro Ser Ser
225                 230                 235                 240
Glu Val Val Leu Asp Ser Lys Arg Gln Val Glu Lys Glu Glu Thr Asn
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Glu Ile Gln Val Val Asn Glu Glu Pro Gln Arg Asp Arg Leu Pro Gln
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Glu Pro Gly Arg Glu Gln Val Val Glu Asp Arg Pro Val Gly Gly Arg
        275                 280                 285
Gly Phe Gly Gly Ala Gly Glu Leu Gly Gln Thr Pro Gln Val Gln Ala
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Ala Leu Ser Val Ser Gln Glu Asn Pro Glu Met Glu Gly Pro Glu Arg
305                 310                 315                 320
Asp Gln Leu Val Ile Pro Asp Gly Gln Glu Glu Glu Gln Glu Ala Ala
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Gly Glu Gly Arg Asn Gln Gln Lys Leu Arg Gly Glu Asp Asp Tyr Asn
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Met Asp Glu Asn Glu Ala Glu Ser Glu Thr Asp Lys Gln Ala Ala Leu
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Ala Gly Asn Asp Arg Asn Ile Asp Val Phe Asn Val Glu Asp Gln Lys
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<212> DNA
<213> Homo sapiens

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<222> (154)..(1707)

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<212> PRT
<213> Homo sapiens

<400> 12359

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Ile	Ser	Val	Glu	Gly	Arg	Glu	Phe	Gln	Leu	His	Arg	Leu	Val	Leu	Ser	
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Ala	Gln	Ser	Cys	Phe	Phe	Arg	Ser	Met	Phe	Thr	Ser	Asn	Leu	Lys	Glu	
65				70					75						80	
Ala	His	Asn	Arg	Val	Ile	Val	Leu	Gln	Asp	Val	Ser	Glu	Ser	Val	Phe	
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Gln	Leu	Leu	Val	Asp	Tyr	Ile	Tyr	His	Gly	Thr	Val	Lys	Leu	Arg	Ala	
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Asp	Ile	Ile	Ser	Asp	Gly	Val	Pro	Cys	Ser	Gln	Asn	Pro	Thr	Glu	Ala	
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Ile	Glu	Ala	Trp	Ile	Asn	Phe	Asn	Lys	Glu	Glu	Arg	Glu	Ala	Phe	Ala	
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Val Val Gly Gly Ser Ile Pro Arg Arg Met Trp Lys Cys Asn Asn Ala
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Gly Glu Glu Asn Asp Leu Asp Phe Phe Thr Lys Pro Ser Arg Leu Ile
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Leu Pro Phe Ala Gly Arg Met His Ala Ala Val His Lys Asp Leu Val
            420                 425                 430
Phe Ile Val Ala Glu Gly Asp Ser Leu Val Cys Tyr Asn Pro Leu Leu
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Asp Ser Phe Thr Arg Leu Cys Leu Pro Glu Ala Trp Ser Ser Ala Pro
    450                 455                 460
Ser Leu Trp Lys Ile Ala Ser Cys Asn Gly Ser Ile Tyr Val Phe Arg
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09/529,403 - 09/529,403

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<213> Homo sapiens

<400> 12361

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Lys Met Thr Val Ala Leu Lys Thr Lys Ser Val Asn Val Arg Glu Lys
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Val Ile Ser Phe Ile Glu Asn Thr Ser Thr Pro Val Asp Arg His Val
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Ser Ser Ser Asp Arg Val Gly Lys Pro Tyr Arg Gly Val Lys Pro Val
    370                 375                 380
Phe Ser Ile Gly Asp Glu Glu Glu Tyr Asp Thr Asp Glu Ile Asp Ser
385                 390                 395                 400
Ser Ser Met Ser Asp Asp Asp Arg Lys Glu Val Val Asn Ile Gln Thr
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Trp Ile Asn Lys Pro Asp Val Lys His His Phe Pro Cys Lys Glu Val
            420                 425                 430
Lys Glu Ser Gly His Met Phe Pro Ser His Leu Leu Val Thr Ala Thr
        435                 440                 445
His Met Tyr Cys Leu Arg Glu Ile Val Ser Arg Lys Gly Leu Ala Tyr
    450                 455                 460
Ile Gln Ser Arg Gln Ala Leu Asn Ser Val Val Lys Ile Thr Ser Lys
465                 470                 475                 480
Lys Lys His Pro Glu Leu Ile Thr Phe Lys Tyr Gly Asn Ser Ser Ala
                485                 490                 495
Ser Gly Ile Glu Ile Leu Ala Ile Glu Arg Tyr Leu Ile Pro Asn Ala
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<213> Homo sapiens

<400> 12363

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Ser Ser Arg Tyr Tyr Lys Leu Leu Lys Glu Arg Glu Asp Leu Pro Ile
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Trp Lys Glu Lys Tyr Ser Phe Met Glu Asn Leu Leu Gln Asn Gln Ile
 65                  70                  75                  80
Val Ile Val Ser Gly Asp Ala Lys Cys Gly Lys Ser Ala Gln Val Pro
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Gln Trp Cys Ala Glu Tyr Cys Leu Ser Ile His Tyr Gln His Gly Gly
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Val Ile Cys Thr Gln Val His Lys Gln Thr Met Val Gln Leu Ala Leu
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Arg Val Ala Asp Glu Met Asp Val Asn Ile Gly His Glu Val Gly Tyr
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Val Ile Pro Phe Glu Asn Cys Cys Thr Asn Glu Thr Ile Leu Arg Tyr
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Cys Thr Asp Asp Met Leu Gln Arg Glu Met Met Ser Asn Pro Phe Leu
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Gly Ser Tyr Gly Val Ile Ile Leu Asp Asp Ile His Glu Arg Ser Ile
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Ala Thr Asp Val Leu Leu Gly Leu Leu Lys Asp Val Leu Leu Ala Arg
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Pro Glu Leu Lys Leu Ile Ile Asn Ser Ser Pro His Leu Ile Ser Lys
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Leu Asn Ser Tyr Tyr Gly Asn Val Pro Val Ile Glu Val Lys Asn Lys
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His Pro Val Glu Val Val Tyr Leu Ser Glu Ala Gln Lys Asp Ser Phe
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Glu Ser Ile Leu Arg Leu Ile Phe Glu Ile His His Ser Gly Glu Lys
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Gly Asp Ile Val Val Phe Leu Ala Cys Glu Gln Asp Ile Glu Lys Val
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Cys Glu Thr Val Tyr Gln Gly Ser Asn Leu Asn Pro Asp Leu Gly Glu
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09052005-09052005

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<212> DNA
<213> Homo sapiens

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Ala	Arg	Gly	Ala	Phe	Ala	Thr	Thr	His	Trp	Val	Val	Thr	Glu	Asp	Gly
		35					40					45			
Lys	Ile	Gln	Gln	Gln	Val	Asp	Ser	Pro	Met	Asn	Leu	Lys	His	Pro	His
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Asp	Leu	Val	Ile	Leu	Met	Arg	Gln	Glu	Ala	Thr	Val	Asn	Tyr	Leu	Lys
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Glu	Leu	Glu	Lys	Gln	Leu	Val	Ala	Gln	Lys	Ile	His	Ile	Glu	Glu	Asn
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Thr Lys Ile Leu Glu Leu Pro Cys Ser Ile His Ala Phe Gln His Leu
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Arg Gly Val Gln Glu Arg Val Asn Leu Ser Ala Pro Leu Leu Pro Lys
            180                 185                 190
Glu Asp Pro Ile Phe Thr Tyr Leu Ser Lys Arg Leu Gly Arg Ser Ile
        195                 200                 205
Asp Asp Ile Gly His Leu Ile His Glu Gly Leu Gln Lys Asn Thr Ser
    210                 215                 220
Ser Trp Val Leu Tyr Asn Met Ala Ser Phe Tyr Trp Arg Ile Lys Asn
225                 230                 235                 240
Glu Pro Tyr Gln Val Val Glu Cys Ala Met Arg Ala Leu His Phe Ser
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Ser Arg His Asn Lys Asp Ile Ala Leu Val Asn Leu Ala Asn Val Leu
            260                 265                 270
His Arg Ala His Phe Ser Ala Asp Ala Ala Val Val Val His Ala Ala
        275                 280                 285
Leu Asp Asp Ser Asp Phe Phe Thr Ser Tyr Tyr Thr Leu Gly Asn Ile
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Tyr Ala Met Leu Gly Glu Tyr Asn His Ser Val Leu Cys Tyr Asp His
305                 310                 315                 320
Ala Leu Gln Ala Arg Pro Gly Phe Glu Gln Ala Ile Lys Arg Lys His
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Ala Val Leu Cys Gln Gln Lys Leu Glu Gln Lys Leu Glu Ala Gln His
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Arg Ser Leu Gln Arg Thr Leu Asn Glu Leu Lys Glu Tyr Gln Lys Gln
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His Asp His Tyr Leu Arg Gln Gln Glu Ile Leu Glu Lys His Lys Leu
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Ile Gln Glu Glu Gln Ile Leu Arg Asn Ile Ile His Glu Thr Gln Met
385                 390                 395                 400
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Lys Gly Leu Arg Ile His Glu Leu Ser Ser Asp Asp Tyr Ser Thr Glu
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His Ala Ile Asn Lys Pro Asn Ala Pro Ile Trp Leu Ile Leu Asn Glu
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Ala Gly Leu Tyr Trp Arg Ala Val Gly Asn Ser Thr Phe Ala Ile Ala
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Cys Leu Gln Arg Ala Leu Asn Leu Ala Pro Leu Gln Tyr Gln Asp Val
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Pro Leu Val Asn Leu Ala Asn Leu Leu Ile His Tyr Gly Leu His Leu
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Asp Ala Thr Lys Leu Leu Leu Gln Ala Leu Ala Ile Asn Ser Ser Glu
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Pro Leu Thr Phe Leu Ser Leu Gly Asn Ala Tyr Leu Ala Leu Lys Asn
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Phe Tyr Pro Phe Leu Tyr Asn Ile Thr Ser Ser Val Cys Ser Gly Asn
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Cys His Glu Lys Thr Leu Asp Asn Ser Arg Asp Lys Gln Lys Tyr Phe
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Asp Asn Ser Gln Ser Leu Asp Ala Ala Glu Glu Glu Pro Ser Glu Arg
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Gly Thr Glu Glu Asp Pro Val Phe Ser Val Glu Asn Ser Gly Arg Asp
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Ser Asp Ala Leu Arg Leu Glu Ser Thr Val Val Glu Glu Ser Asn Gly
                805                 810                 815
Ser Asp Glu Met Glu Asn Ser Asp Glu Thr Lys Met Ser Glu Glu Ile
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Leu Ala Leu Val Asp Glu Phe Gln Gln Ala Trp Pro Leu Glu Gly Phe
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Gly Gly Ala Leu Glu Met Lys Gly Arg Arg Leu Asp Leu Gln Gly Ile
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Arg Val Leu Lys Lys Gly Pro Gln Asp Gly Val Ala Arg Ser Ser Cys
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Phe Gln Val Lys Arg Val Lys Lys Pro Lys Gly Asp His Lys Lys Thr
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Pro Gly Lys Lys Val Glu Thr Gly Gln Ile Glu Asn Gly His Arg Tyr
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<400> 12367
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35 40 45
Thr Ser Ser Lys Cys Met Met Lys Met Phe Ser Ser Thr Gly Gln Gly
50 55 60
Asn Thr Glu Val Val His Thr Gly Thr Leu Gln Ile His Ala Ser His
65 70 75 80
His Ile Gly Asp Thr Cys Phe Gln Glu Ile Glu Lys Asp Ile His Asp
85 90 95
Phe Val Phe Gln Trp Gln Glu Asn Glu Thr Asn Gly His Glu Ala Leu
100 105 110
Met Thr Lys Ile Lys Lys Leu Met Ser Ser Thr Glu Arg His Asp Gln
115 120 125
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0050-0045-0200

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Ser Gln Arg Ile Ser Cys Arg Pro Lys Thr Arg Ile Ser Asn Lys Tyr
            180                 185                 190
Arg Asn Asn Phe Leu Gln Ser Ser Leu Leu Thr Gln Lys Arg Glu Val
        195                 200                 205
His Thr Arg Glu Lys Ser Phe Gln Arg Asn Glu Ser Gly Lys Ala Phe
    210                 215                 220
Asn Gly Ser Ser Leu Leu Lys Lys His Gln Ile Ile His Leu Gly Asp
225                 230                 235                 240
Lys Gln Tyr Lys Cys Asp Val Cys Gly Lys Asp Phe His Gln Lys Arg
                245                 250                 255
Tyr Leu Ala Cys His Arg Cys His Thr Gly Glu Asn Pro Tyr Lys Cys
            260                 265                 270
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Lys Ala Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
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Lys Val Phe Asn Gln Gln Ser Asn Leu Ala Arg His His Arg Val His
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Lys Val Phe Asn His Lys Ser Asn Leu Ala Cys His His Arg Leu His
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<213> Homo sapiens

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<222> (116)..(2635)

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0050203-050203

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<211> 840
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<213> Homo sapiens

<400> 12369

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Val Gln Met Gln Val Gln Pro Gln Gln Ser Asn Ala Gly Val Gly Gln
    50                  55                  60
Pro Ala Ser Gly Glu Ser Ser Leu Ile Lys Gln Leu Leu Leu Pro Lys
65                  70                  75                  80
Arg Gly Pro Ser Thr Pro Gly Gly Lys Leu Ile Leu Pro Ala Pro Gln
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Ile Pro Pro Pro Asn Asn Ala Arg Ala Pro Ser Pro Gln Val Val Tyr
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Gln Val Ala Ser Asn Gln Ala Ala Gly Phe Gly Val Gln Gly Gln Thr
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Leu Gln Ile Leu Pro Gly Pro Leu Ile Ser Asn Ser Pro Ala Thr Ile
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Phe Gln Gly Thr Ser Gly Asn Gln Val Thr Ile Thr Val Val Pro Asn
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Thr Ser Phe Ala Pro Ala Thr Val Ser Gln Gly Asn Ala Thr Gln Leu
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Ser Ser Cys Thr Thr Ala Thr Pro Pro Phe Lys Gly Asp Lys Ile Ile
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Cys Gln Lys Glu Glu Glu Ala Lys Glu Ala Thr Gly Leu His Val His
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Glu Arg Lys Ile Glu Val Met Glu Asn Pro Ser Cys Arg Arg Gly Ala
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Thr Asn Thr Ser Asn Gly Asp Thr Lys Glu Asn Glu Met His Val Gly
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EP 2 305 696 A2 20110406

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Pro Leu Val Asn Gly Ile Cys Asp Phe Asp Lys Gly Asp Gly Ser His
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Gly Glu Ile Ser Pro Met Glu Pro Gln Gly Thr Leu Asp Ile Thr Gln
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Gln Asp Thr Ala Lys Gly Asp Gln Leu Glu Arg Ile Ser Asn Gly Pro
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Pro Pro Ser Pro Ala Val Gln Val Gln Gly Gln Pro Asn Ser Ser Gln
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Pro Ser Pro Phe Ser Gly Ser Ser Gln Pro Gly Asp Pro Met Arg Lys
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Gln Thr Pro Ser Gln Val Phe Tyr His Ala Ala Thr Glu His Gly Gly
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Lys Asp Val Tyr Pro Gly Gln Cys Leu Trp Glu Gly Cys Glu Pro Phe
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Ala Gly Ser Gln Lys Ser Ser Thr Lys Gln Pro Thr Val Gly Gly Thr
                725                 730                 735
Ser Ser Thr Pro Arg Ala Gln Lys Ala Ile Val Asn His Pro Ser Ala
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Ala Leu Met Ala Leu Arg Arg Gly Ser Arg Asn Leu Val Phe Arg Asp
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Phe Thr Asp Glu Lys Glu Gly Pro Ile Thr Lys His Ile Arg Leu Thr
    770                 775                 780
Ala Ala Leu Ile Leu Lys Asn Ile Gly Lys Tyr Ser Glu Cys Gly Arg
785                 790                 795                 800
Arg Leu Leu Lys Arg His Glu Asn Asn Leu Ser Val Leu Ala Ile Ser
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<213> Homo sapiens

<220>
<221> CDS
<222> (74)..(2398)

<400> 12370

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 65                  70                  75                  80
Ile Ile Phe Ser Arg Asn Ser Gly Leu Val Ser Ile Thr Ser Arg Glu
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Asn Val Ser Ile Leu Ala Glu Asp Leu Glu Gly Ser Leu Ala Ser Ser
            100                 105                 110
Val Ala Gly Pro Asn Ser Glu Ser Met Ile Phe Glu Thr Thr Thr Lys
        115                 120                 125
Asn Glu Thr Ile Ala Gln Glu Asp Lys Ile Lys Leu Leu Lys Ala Ala
    130                 135                 140
Phe Leu Gln Tyr Cys Arg Lys Asp Leu Gly His Ala Gln Met Val Val
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Asp Glu Leu Phe Ser Ser His Ser Asp Leu Asp Ser Asp Ser Glu Leu
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Asp Arg Ala Val Thr Gln Ile Ser Val Asp Leu Met Asp Asp Tyr Pro
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Ala Ser Asp Pro Arg Trp Ala Glu Ser Val Pro Glu Glu Ala Pro Gly
        195                 200                 205
Phe Ser Asn Thr Ser Leu Ile Ile Leu His Gln Leu Glu Asp Lys Met
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Lys Ala His Ser Phe Leu Met Asp Phe Ile His Gln Val Gly Leu Phe
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Gly Arg Leu Gly Ser Phe Pro Val Arg Gly Thr Pro Met Ala Thr Arg
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Leu Leu Leu Cys Glu His Ala Glu Lys Leu Ser Ala Ala Ile Val Leu
            260                 265                 270
Lys Asn His His Ser Arg Leu Ser Asp Leu Val Asn Thr Ala Ile Leu
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Ile Ala Leu Asn Lys Arg Glu Tyr Glu Ile Pro Ser Asn Leu Thr Pro
    290                 295                 300
Ala Asp Val Phe Phe Arg Glu Val Ser Gln Val Asp Thr Ile Cys Glu
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Cys Leu Leu Glu His Glu Glu Gln Val Leu Arg Asp Ala Pro Met Asp
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Ser Ile Glu Trp Ala Glu Val Val Ile Asn Val Asn Asn Ile Leu Lys
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Asp Met Leu Gln Ala Ala Ser His Tyr Arg Gln Asn Arg Asn Ser Leu
        355                 360                 365
Tyr Arg Arg Glu Glu Ser Leu Glu Lys Glu Pro Glu Tyr Val Pro Trp
    370                 375                 380
Thr Ala Thr Ser Gly Pro Gly Gly Ile Arg Thr Val Ile Ile Arg Gln
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    450                 455                 460
Leu Leu Ser Pro Leu Leu Ser Leu Gly Gln Tyr Leu Trp Ala Ala Ser
465                 470                 475                 480
Leu Ala Glu Lys Tyr Cys Asp Phe Asp Ile Leu Val Gln Met Cys Glu
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Gln Thr Asp Asn Gln Ser Arg Leu Gln Arg Tyr Met Thr Gln Phe Ala
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Asp Gln Asn Phe Ser Asp Phe Leu Phe Arg Trp Tyr Leu Glu Lys Gly
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Lys Arg Gly Lys Leu Leu Ser Gln Pro Ile Ser Gln His Gly Gln Leu
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Asn Met Glu Thr Arg Tyr Phe Ala Lys Lys Lys Thr Leu Leu Gly Leu
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Ser Lys Leu Ala Ala Leu Ala Ser Asp Phe Ser Glu Asp Met Leu Gln
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Glu Lys Ile Glu Glu Met Ala Glu Gln Glu Arg Phe Leu Leu His Gln
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Glu Glu Asn Arg Arg Ala Asn Glu Tyr Asp Phe Lys Lys Ala Leu Asp
            660                 665                 670
Leu Leu Glu Tyr Ile Asp Glu Glu Glu Asp Ile Asn Ile Asn Asp Leu
        675                 680                 685
Lys Leu Glu Ile Leu Cys Lys Ala Leu Gln Arg Asp Asn Trp Ser Ser
    690                 695                 700
Ser Asp Gly Lys Asp Asp Pro Ile Glu Val Ser Lys Asp Ser Ile Phe
705                 710                 715                 720
Val Lys Ile Leu Gln Lys Leu Leu Lys Asp Gly Ile Gln Leu Ser Glu
                725                 730                 735
Tyr Leu Pro Glu Val Lys Asp Leu Leu Gln Ala Asp Gln Leu Gly Ser
            740                 745                 750
Leu Lys Ser Asn Pro Tyr Phe Glu Phe Val Leu Lys Ala Asn Tyr Glu
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<213> Homo sapiens

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<222> (65)..(2698)

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<212> PRT
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<400> 12373

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Val	Tyr	Leu	Gly	Gln	Lys	Gly	Gly	Lys	Leu	Tyr	Ala	Val	Lys	Val	Val
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Leu	Ser	Lys	Val	Thr	Leu	Asn	Arg	Asp	Ile	Asn	Met	Met	Asp	Ile	Leu
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Cys Val Asn Leu Ala Lys Lys Cys Phe Ser Gly Glu Val Ser Trp Glu
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Lys Arg Asp Tyr Leu Ser Ser Ser Phe Leu Cys Ser Asp Asp Asp Arg
545 550 555 560
Ala Ser Lys Asn Ile Ser Met Asn Ser Asp Ser Ser Phe Pro Gly Ile
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Ser Ile Met Glu Ser Pro Leu Glu Ser Gln Pro Leu Asp Ser Asp Arg
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Ser Phe Asn Ser His Ile Asn Ala Ser Asn Asn Ser Glu Pro Ser Arg
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Met Asn Met Thr Ser Leu Asp Ala Met Asp Ile Ser Arg Ala Tyr Ser
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<211> 242

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<212> PRT
<213> Homo sapiens

<400> 12379

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Thr Asp Leu His Asp Gly Trp Pro Met Ile Cys Leu Glu Lys Thr Lys
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Leu Tyr Met Ala Lys Tyr Ala Asp Tyr Phe Leu Glu Val Ser Leu Gln
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Ala Ala Ala Cys Val Ala Ser Ser Arg Ile Ile Leu Arg Leu Ser Pro
65                  70                  75                  80
Thr Trp Pro Thr Arg Leu His Arg Leu Thr Ala Tyr Ser Trp Asp Phe
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Leu Val Gln Cys Ile Glu Arg Leu Leu Ile Ala His Asp Asn Asp Val
            100                 105                 110
Lys Glu Ala Asn Lys Gln Arg Gly Gln Ala Gly Pro Gln Ser Ala Gln
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Leu Ser Val Phe Gln Thr Ala Ser Gln Pro Ser Arg Pro Val His Phe
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Gln Gln Pro Gln Tyr Leu His Gln Thr His Gln Thr Ser Leu Gln Tyr
145                 150                 155                 160
Arg His Pro Thr Ser Glu Gln Pro Ser Cys Gln Gln Ile Val Ser Thr
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Thr His Thr Ser Ser Tyr Thr Leu Gln Thr Cys Pro Ala Gly Phe Gln
            180                 185                 190
Thr Ser Val Gln Gly Leu Gly His Met Gln Thr Gly Val Gly Met Ser
        195                 200                 205
Leu Ala Ile Pro Val Glu Val Lys Pro Cys Leu Ser Val Ser Tyr Asn
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1510)..(3522)

<400> 12380

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0060230.0020

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<210> 12381
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<212> PRT
<213> Homo sapiens

<400> 12381

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         35                  40                  45
Ala Val Phe Arg Lys Tyr Pro Ile Asp Leu Ala Gly Leu Leu Gln Tyr
     50                  55                  60
Val Ala Asn Gln Leu Lys Ala Gly Lys Ser Phe Asp Leu Leu Ile Leu
 65                  70                  75                  80
Lys Glu Val Val Gln Lys Met Ala Gly Ile Glu Ile Thr Glu Glu Met
                 85                  90                  95
Thr Met Glu Gln Leu Glu Ala Met Thr Gly Gly Glu Gln Leu Lys Ala
            100                 105                 110
Glu Gly Gly Tyr Phe Gly Gln Ile Arg Asn Thr Lys Lys Ser Ser Gln
        115                 120                 125
Arg Leu Lys Asp Ala Leu Leu Asp His Asp Leu Ala Leu Pro Leu Cys
    130                 135                 140
Leu Leu Met Ala Gln Gln Arg Asn Gly Val Ile Phe Gln Glu Gly Gly
145                 150                 155                 160
Glu Lys His Leu Lys Leu Val Gly Lys Leu Tyr Asp Gln Cys His Asp
                165                 170                 175
Thr Leu Val Gln Phe Gly Gly Phe Leu Ala Ser Asn Leu Ser Thr Glu
            180                 185                 190
Asp Tyr Ile Lys Arg Val Pro Ser Ile Asp Val Leu Cys Asn Glu Phe
        195                 200                 205
His Thr Pro His Asp Ala Ala Phe Phe Leu Ser Arg Pro Met Tyr Ala
    210                 215                 220
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US 2005/0260686 A1

0050450-050800

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        275                 280                 285
Thr Met Tyr Asp Leu Ala Val Pro His Thr Ser Tyr Glu Arg Glu Val
    290                 295                 300
Asn Lys Leu Lys Val Gln Met Lys Ala Ile Asp Asp Asn Gln Glu Met
305                 310                 315                 320
Pro Pro Asn Lys Lys Lys Lys Glu Lys Glu Arg Cys Thr Ala Leu Gln
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Asp Lys Leu Leu Glu Glu Glu Lys Lys Gln Met Glu His Val Gln Arg
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Val Leu Gln Arg Leu Lys Leu Glu Lys Asp Asn Trp Leu Leu Ala Lys
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Ser Thr Lys Asn Glu Thr Ile Thr Lys Phe Leu Gln Leu Cys Ile Phe
    370                 375                 380
Pro Arg Cys Ile Phe Ser Ala Ile Gly Ala Val Tyr Cys Ala Arg Phe
385                 390                 395                 400
Val Glu Leu Val His Gln Gln Lys Thr Pro Asn Phe Ser Thr Leu Leu
                405                 410                 415
Cys Tyr Asp Arg Val Phe Ser Asp Ile Ile Tyr Thr Val Ala Ser Cys
            420                 425                 430
Thr Glu Asn Glu Ala Ser Arg Tyr Gly Arg Phe Leu Cys Cys Met Leu
        435                 440                 445
Glu Thr Val Thr Arg Trp His Ser Asp Arg Ala Thr Tyr Glu Lys Glu
    450                 455                 460
Cys Gly Asn Tyr Pro Gly Phe Leu Thr Ile Leu Arg Ala Thr Gly Phe
465                 470                 475                 480
Asp Gly Gly Asn Lys Ala Asp Gln Leu Asp Tyr Glu Asn Phe Arg His
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Val Val His Lys Trp His Tyr Lys Leu Thr Lys Ala Ser Val His Cys
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Leu Glu Thr Gly Glu Tyr Thr His Ile Arg Asn Ile Leu Ile Val Leu
        515                 520                 525
Thr Lys Ile Leu Pro Trp Tyr Pro Lys Val Leu Asn Leu Gly Gln Ala
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Leu Glu Arg Arg Val His Lys Ile Cys Gln Glu Glu Lys Glu Lys Arg
545                 550                 555                 560
Pro Asp Leu Tyr Ala Leu Ala Met Gly Tyr Ser Gly Gln Leu Lys Ser
                565                 570                 575
Arg Lys Ser Tyr Met Ile Pro Glu Asn Glu Phe His His Lys Asp Pro
            580                 585                 590
Pro Pro Arg Asn Ala Val Ala Ser Val Gln Asn Gly Pro Gly Gly Gly
        595                 600                 605
Pro Ser Ser Ser Ser Ile Gly Ser Ala Ser Lys Ser Asp Glu Ser Ser
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    610                 615                 620
Thr Glu Glu Thr Asp Lys Ser Arg Glu Arg Ser Gln Cys Gly Val Lys
625                 630                 635                 640
Ala Val Asn Lys Ala Ser Ser Thr Thr Pro Lys Gly Asn Ser Ser Asn
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<210> 12382
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (109)..(3087)

<400> 12382

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09/529,503

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<212> PRT
<213> Homo sapiens

<400> 12383

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		20					25					30			
Ser	Arg	Leu	Leu	Val	Tyr	Asp	Thr	Ser	Asp	Gly	Thr	Leu	Leu	Gln	Pro
	35					40					45				

0052045.0048

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Gly Lys Arg Phe Ala Ser Gly Ser Ala Asp Lys Ser Val Ile Ile Trp
 65                  70                  75                  80
Thr Ser Lys Leu Glu Gly Ile Leu Lys Tyr Thr His Asn Asp Ala Ile
                 85                  90                  95
Gln Cys Val Ser Tyr Asn Pro Ile Thr His Gln Leu Ala Ser Cys Ser
            100                 105                 110
Ser Ser Asp Phe Gly Leu Trp Ser Pro Glu Gln Lys Ser Val Ser Lys
        115                 120                 125
His Lys Ser Ser Ser Lys Ile Ile Cys Cys Ser Trp Thr Asn Asp Gly
    130                 135                 140
Gln Tyr Leu Ala Leu Gly Met Phe Asn Gly Ile Ile Ser Ile Arg Asn
145                 150                 155                 160
Lys Asn Gly Glu Glu Lys Val Lys Ile Glu Arg Pro Gly Gly Ser Leu
                165                 170                 175
Ser Pro Ile Trp Ser Ile Cys Trp Asn Pro Ser Arg Glu Glu Arg Asn
            180                 185                 190
Asp Ile Leu Ala Val Ala Asp Trp Gly Gln Lys Val Ser Phe Tyr Gln
        195                 200                 205
Leu Ser Gly Lys Gln Ile Gly Lys Asp Arg Ala Leu Asn Phe Asp Pro
    210                 215                 220
Cys Cys Ile Ser Tyr Phe Thr Lys Gly Glu Tyr Ile Leu Leu Gly Gly
225                 230                 235                 240
Ser Asp Lys Gln Val Ser Leu Phe Thr Lys Asp Gly Val Arg Leu Gly
                245                 250                 255
Thr Val Gly Glu Gln Asn Ser Trp Val Trp Thr Cys Gln Ala Lys Pro
            260                 265                 270
Asp Ser Asn Tyr Val Val Val Gly Cys Gln Asp Gly Thr Ile Ser Phe
        275                 280                 285
Tyr Gln Leu Ile Phe Ser Thr Val His Gly Leu Tyr Lys Asp Arg Tyr
    290                 295                 300
Ala Tyr Arg Asp Ser Met Thr Asp Val Ile Val Gln His Leu Ile Thr
305                 310                 315                 320
Glu Gln Lys Val Arg Ile Lys Cys Lys Glu Leu Val Lys Lys Ile Ala
                325                 330                 335
Ile Tyr Arg Asn Arg Leu Ala Ile Gln Leu Pro Glu Lys Ile Leu Ile
            340                 345                 350
Tyr Glu Leu Tyr Ser Glu Asp Leu Ser Asp Met His Tyr Arg Val Lys
        355                 360                 365
Glu Lys Ile Ile Lys Lys Phe Glu Cys Asn Leu Leu Val Val Cys Ala
    370                 375                 380
Asn His Ile Ile Leu Cys Gln Glu Lys Arg Leu Gln Cys Leu Ser Phe
385                 390                 395                 400
Ser Gly Val Lys Glu Arg Glu Trp Gln Met Glu Ser Leu Ile Arg Tyr
                405                 410                 415
Ile Lys Val Ile Gly Gly Pro Pro Gly Arg Glu Gly Leu Leu Val Gly
            420                 425                 430
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0050245 - 0050245

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Leu Lys Asn Gly Gln Ile Leu Lys Ile Phe Val Asp Asn Leu Phe Ala
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    450                 455                 460
Ala Ser Arg Lys Lys Leu Ala Val Val Asp Glu Asn Asp Thr Cys Leu
465                 470                 475                 480
Val Tyr Asp Ile Asp Thr Lys Glu Leu Leu Phe Gln Glu Pro Asn Ala
                485                 490                 495
Asn Ser Val Ala Trp Asn Thr Gln Cys Glu Asp Met Leu Cys Phe Ser
            500                 505                 510
Gly Gly Gly Tyr Leu Asn Ile Lys Ala Ser Thr Phe Pro Val His Arg
        515                 520                 525
Gln Lys Leu Gln Gly Phe Val Val Gly Tyr Asn Gly Ser Lys Ile Phe
    530                 535                 540
Cys Leu His Val Phe Ser Ile Ser Ala Val Glu Val Pro Gln Ser Ala
545                 550                 555                 560
Pro Met Tyr Gln Tyr Leu Asp Arg Lys Leu Phe Lys Glu Ala Tyr Gln
                565                 570                 575
Ile Ala Cys Leu Gly Val Thr Asp Thr Asp Trp Arg Glu Leu Ala Met
            580                 585                 590
Glu Ala Leu Glu Gly Leu Asp Phe Glu Thr Ala Lys Lys Ala Phe Ile
        595                 600                 605
Arg Val Gln Asp Leu Arg Tyr Leu Glu Leu Ile Ser Ser Ile Glu Glu
    610                 615                 620
Arg Lys Lys Arg Gly Glu Thr Asn Asn Asp Leu Phe Leu Ala Asp Val
625                 630                 635                 640
Phe Ser Tyr Gln Gly Lys Phe His Glu Ala Ala Lys Leu Tyr Lys Arg
                645                 650                 655
Ser Gly His Glu Asn Leu Ala Leu Glu Met Tyr Thr Asp Leu Cys Met
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Thr Phe Asp Glu Lys Thr Leu Ala Arg Asp Leu Ile Gln Ala Ala Gln
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Lys Gln Met Ala His Ala Val Arg Gly Lys Ala Ile Arg Ser Ser Pro
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His Gln Pro Leu Leu Leu Pro Pro Leu Gln Thr Pro Lys Leu Tyr Gly
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<400> 12386

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<213> Homo sapiens

<400> 12387

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<400> 12389

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Val Ala Trp Ile Thr Leu Leu Met Leu Pro Asp Phe Asp Arg Arg Trp
225                 230                 235                 240
Asp Asp Thr Ile Leu Ser Ser Ala Leu Ala Ala Asn Gly Trp Val Phe
                245                 250                 255
Leu Leu Ala Tyr Val Ser Pro Glu Phe Trp Leu Leu Thr Lys Gln Arg
            260                 265                 270
Asn Pro Met Asp Tyr Pro Val Glu Asp Ala Phe Cys Lys Pro Gln Leu
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Val Lys Lys Ser Tyr Gly Val Glu Asn Arg Ala Tyr Ser Gln Glu Glu
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Ile Thr Gln Gly Phe Glu Glu Thr Gly Asp Thr Leu Tyr Ala Pro Tyr
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Ser Thr His Phe Gln Leu Gln Asn Gln Pro Pro Gln Lys Glu Phe Ser
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<400> 12391

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        35                  40                  45
Leu Gln Glu Lys Ser Val Pro Lys Ala Ala Gln Asp Leu Met Thr Asn
    50                  55                  60
Gly Tyr Val Ser Leu Gln Glu Lys Asp Ile Phe Val Ser Gly Val Lys
65                  70                  75                  80
Ile Phe Tyr Gly Ser Gln Thr Gly Thr Ala Lys Gly Phe Ala Thr Val
                85                  90                  95
Leu Ala Glu Ala Val Thr Ser Leu Asp Leu Pro Val Ala Ile Ile Asn
            100                 105                 110
Leu Lys Glu Tyr Asp Pro Asp Asp His Leu Ile Glu Glu Val Thr Ser
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Lys Asn Val Cys Val Phe Leu Val Ala Thr Tyr Thr Asp Gly Leu Pro
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Thr Glu Ser Ala Glu Trp Phe Cys Lys Trp Leu Glu Glu Ala Ser Ile
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Phe Gly Leu Gly Asn Ser Ala Tyr Ala Ser His Phe Asn Lys Val Gly
            180                 185                 190
Lys Asn Val Asp Lys Trp Leu Trp Met Leu Gly Ala His Arg Val Met
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Ser Arg Gly Glu Gly Asp Cys Asp Val Val Lys Ser Lys His Gly Ser
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Ile Glu Ala Asp Phe Arg Ala Trp Lys Thr Lys Phe Ile Ser Gln Leu
225                 230                 235                 240
Gln Ala Leu Gln Lys Gly Glu Arg Lys Lys Ser Cys Gly Gly His Cys
                245                 250                 255
Lys Lys Gly Lys Cys Glu Ser His Gln His Gly Ser Glu Glu Arg Glu
            260                 265                 270
Glu Gly Ser His Glu Gln Asp Glu Leu His His Arg Asp Thr Glu Glu
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Ala Asn Lys Cys Val Phe Cys Trp Arg His His Thr Asn Pro Val Gly
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Val Lys Ala Trp Asn Val Asp Glu Leu Gln Ala Tyr Ala Gln Leu Val
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Gly Glu Ser Ser Ala Ser Ser Leu Thr Met Ala His Val Pro Trp His
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Tyr Glu Ile Ala Cys Glu His Glu His Ser Asn Cys Leu Leu Ile Ala
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His Arg Lys Phe Lys Ile Gly Gly Glu Trp Trp Thr Trp Ile Asn Tyr
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Asn Arg Phe Gln Glu Leu Ile Gln Glu Tyr Glu Asp Ser Gly Gly Ser
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Lys Thr Phe Ser Ala Lys Asp Tyr Met Ala Arg Thr Pro His Trp Ala
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<220>
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His Glu Arg Ala Arg Leu Arg Ser Thr Arg Pro His Ser Leu Asp Arg
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    610                 615                 620
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<213> Homo sapiens

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Pro Ile Thr Ala Leu Ile Thr Pro Gly Pro Val Arg His Cys Gln Ile
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Pro Asp Leu Pro Val Asp Gly Ser Leu Leu Phe Glu Phe Leu Phe Phe
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Ile Tyr Leu Leu Val Ala Leu Phe Ile Gln Tyr Ile Asn Ile Tyr Lys
                 85                  90                  95
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            100                 105                 110
Asn Phe His Leu Ile Asp Tyr His Leu Ala Ala Phe Ile Thr Val Met
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Val Leu Leu Thr Leu Cys Gly Trp Val Leu Cys Trp Thr Leu Val Asn
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His Leu Leu Leu Thr Asp Tyr Asn Tyr Val Val Gln His Glu Ala Val
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Glu Glu Ser Ala Ser Thr Val Gly Gly Leu Ala Lys Ser Lys Asp Phe
225                 230                 235                 240
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Pro Ile Pro Thr His Ser Cys Pro Leu Ser Pro Asp Leu Ile Arg Asn
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Pro Leu Arg Leu Leu Asn Leu Leu Ile Leu Ile Glu Gly Ser Val Val
            420                 425                 430
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Leu Ser Met Ala Leu Ile Leu Phe Cys Asn Tyr Tyr Val Leu Phe Lys
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<220>
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<222> (67)..(519)

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<400> 12397

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Glu	Leu	Ala	Gly	Asn	Ala	Ala	Arg	Asp	Asn	Lys	Lys	Thr	Arg	Ile	Ile
65				70					75						80
Pro	Arg	His	Leu	Gln	Leu	Ala	Ile	Arg	Asn	Asp	Glu	Glu	Leu	Asn	Lys
			85					90					95		
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		100					105					110			
Gln	Ala	Val	Leu	Leu	Pro	Val	Cys	Glu	His	Ser	Gly	Pro	Ser	Ser	Gly
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35 40 45
Leu Val Gln Leu Asp Asp Tyr Arg Phe Ala Ser Ala Gly Asp Asp Gly
50 55 60
Ile Val Val Val Trp Asn Ala Gln Thr Gly Glu Lys Leu Leu Glu Leu
65 70 75 80
Asn Gly His Thr Gln Lys Ile Thr Ala Ile Ile Thr Phe Pro Ser Leu
85 90 95
Glu Ser Cys Glu Glu Lys Asn Gln Leu Ile Leu Thr Ala Ser Ala Asp
100 105 110
Arg Thr Val Ile Val Trp Asp Gly Asp Thr Thr Arg Gln Val Gln Arg
115 120 125
Ile Ser Cys Phe Gln Ser Thr Val Lys Cys Leu Thr Val Leu Gln Arg
130 135 140
Leu Asp Val Trp Leu Ser Gly Gly Asn Asp Leu Cys Val Trp Asn Arg
145 150 155 160
Lys Leu Asp Leu Leu Cys Lys Thr Ser His Leu Ser Asp Thr Gly Ile
165 170 175
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180 185 190
Lys Glu Leu Ile Ile Phe Arg Leu Val Ala Pro Thr Glu Gly Ser Leu
195 200 205
Glu Trp Asp Ile Leu Glu Val Lys Arg Leu Leu Asp His Gln Asp Asn
210 215 220
Ile Leu Ser Leu Ile Asn Val Asn Asp Leu Ser Phe Val Thr Gly Ser
225 230 235 240
His Val Gly Glu Leu Ile Ile Trp Asp Ala Leu Asp Trp Thr Met Gln
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Ala Tyr Glu Arg Asn Phe Trp Asp Pro Ser Pro Gln Leu Asp Thr Gln
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Gln Glu Ile Lys Leu Cys Gln Lys Ser Asn Asp Ile Ser Ile His His

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Leu Ile Ser Cys Ser Glu Asp Gly Ser Val Arg Ile Trp Glu Leu Arg
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Glu Lys Gln Gln Leu Ala Ala Glu Pro Val Pro Thr Gly Phe Phe Asn
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Met Trp Gly Phe Gly Arg Val Ser Lys Gln Ala Ser Gln Pro Val Lys
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Lys Gln Gln Glu Asn Ala Thr Ser Cys Ser Leu Glu Leu Ile Gly Asp
385                 390                 395                 400
Leu Ile Gly His Ser Ser Ser Val Glu Met Phe Leu Tyr Phe Glu Asp
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His Gly Leu Val Thr Cys Ser Ala Asp His Leu Ile Ile Leu Trp Lys
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<213> Homo sapiens

<400> 12401

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            20                  25                  30
Cys Ser Leu Ile Ser Gly Ile Ile Arg Ala Ser Ser Glu Ser Ser Tyr
        35                  40                  45
Pro Thr Ala Glu Ser Gln Ala Glu Ala Glu Arg Ala Leu Arg Glu Met
    50                  55                  60
Arg Asp Leu Leu Met Asn Leu Gly Gln Glu Ile Thr Arg Ala Cys Glu
65                  70                  75                  80
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Asp Lys Arg Arg Gln Asp Glu Glu Glu Ala Gln Val Lys Leu Gln Glu
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Ala Gln Met Gln Gln Gly Pro Glu Ala His Lys Glu Pro Pro Ala Pro
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Ser Gln Gly Pro Gly Gly Lys Gln Asn Glu Asp Leu Gln Val Lys Val
115 120 125
Gln Asp Ile Thr Met Gln Trp Tyr Gln Gln Leu Gln Asp Ala Ser Met
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Gln Cys Val Leu Thr Phe Glu Gly Leu Thr Asn Ser Lys Asp Ser Gln
145 150 155 160
Ala Lys Lys Ile Lys Met Asp Leu Gln Lys Ala Ala Thr Ile Pro Val
165 170 175
Ser Gln Ile Ser Thr Ile Ala Gly Ser Lys Leu Lys Glu Ile Phe Asp
180 185 190
Lys Ile His Ser Leu Leu Ser Gly Lys Pro Val Gln Ser Gly Gly Arg
195 200 205
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210 215 220
Lys Leu Ala Glu Lys Phe Val Lys Gln Gly Glu Glu Glu Val Ala Ser
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His His Glu Ala Ala Phe Pro Ile Ala Val Val Ala Ser Gly Ile Trp
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260 265 270
Lys Cys Pro Tyr Ser Val Pro Phe Tyr Pro Thr Phe Lys Glu Gly Met
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290 295 300
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370 375 380
Val Gln Phe Trp Lys Met Leu Ile Leu Ile Lys Glu Asp Tyr Phe Pro
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<212> DNA
<213> Homo sapiens

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<211> 2445

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<212> DNA
<213> Homo sapiens

<220>
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<222> (320)..(694)

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<213> Homo sapiens

<400> 12404

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Gly	Asp	Leu	Cys	Cys	Arg	Pro	Ser	Leu	Thr	Ala	Gly	Ser	Arg	Gly	Val
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<213> Homo sapiens

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09/25/2006 09:52:03 PM

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<400> 12406

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Lys	Ala	Gly	Pro	Glu	Leu	Gln	Glu	Glu	Leu	Asp	Thr	Val	Gly	Gln	Gly
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Val	Ala	Val	Ser	Met	Gly	Thr	Val	Leu	Lys	Thr	Ser	Ser	Trp	Asn	Leu
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Asp	Cys	Arg	Tyr	Val	Leu	His	Val	Val	Ala	Pro	Glu	Trp	Arg	Asn	Gly
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Ser	Thr	Ser	Ser	Leu	Lys	Ile	Met	Glu	Asp	Ile	Ile	Arg	Glu	Cys	Met
			100					105					110		
Glu	Ile	Thr	Glu	Ser	Leu	Ser	Leu	Lys	Ser	Ile	Ala	Phe	Pro	Ala	Ile
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Phe Gln Val Ala Ser Gly Asp Ile Thr Lys Gly Glu Ala Asp Val Ile
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Val Asn Ser Thr Ser Asn Ser Phe Asn Leu Lys Ala Gly Val Ser Lys
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Gln Ala Gln Gln Arg Lys Asn Asp Tyr Ile Ile Thr Gly Gly Gly Phe
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Ser Ile Cys Leu Pro Ala Ile Gly Thr Gly Asn Ala Lys Gln His Pro
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Asp Lys Val Ala Glu Ala Ile Ile Asp Ala Ile Glu Asp Phe Val Gln
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Lys Gly Ser Ala Gln Ser Val Lys Lys Val Lys Val Val Ile Phe Leu
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Pro Gln Val Leu Asp Val Phe Tyr Ala Asn Met Lys Lys Arg Glu Gly
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Thr Gln Leu Ser Ser Gln Gln Ser Val Met Ser Lys Leu Ala Ser Phe
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Glu Lys Lys Thr Glu Ser Ala Thr Phe Arg Val Cys Gly Glu Asn Val
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Thr Cys Val Glu Tyr Ala Ile Ser Trp Leu Gln Asp Leu Ile Glu Lys
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Glu Gln Cys Pro Tyr Thr Ser Glu Asp Glu Cys Ile Lys Asp Phe Asp
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Glu Lys Glu Tyr Gln Glu Leu Asn Glu Leu Gln Lys Lys Leu Asn Ile
465                 470                 475                 480
Asn Ile Ser Leu Asp His Lys Arg Pro Leu Ile Lys Val Leu Gly Ile
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Ser Arg Asp Val Met Gln Ala Arg Asp Glu Ile Glu Ala Met Ile Lys
            500                 505                 510
Arg Val Arg Leu Ala Lys Glu Gln Glu Ser Arg Ala Asp Cys Ile Ser
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Glu Phe Ile Glu Trp Gln Tyr Asn Asp Asn Asn Thr Ser His Cys Phe
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<400> 12408

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Gly Tyr Lys Ser Asn Gln Val Arg Gly Leu Tyr Asp Phe Tyr Leu Pro
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Arg Glu Glu Leu Trp Ile Tyr Asn Met Glu Thr Gly Arg Trp Lys Lys
65                  70                  75                  80
Ile Asn Thr Glu Gly Asp Val Pro Pro Ser Met Ser Gly Ser Cys Ala
                85                  90                  95
Val Cys Val Asp Arg Val Leu Tyr Leu Phe Gly Gly His His Ser Arg
            100                 105                 110
Gly Asn Thr Asn Lys Phe Tyr Met Leu Asp Ser Arg Ser Thr Asp Arg
        115                 120                 125
Val Leu Gln Trp Glu Arg Ile Asp Cys Gln Gly Ile Pro Pro Ser Ser
    130                 135                 140
Lys Asp Lys Leu Gly Val Trp Val Tyr Lys Asn Lys Leu Ile Phe Phe
145                 150                 155                 160
Gly Gly Tyr Gly Tyr Leu Pro Glu Asp Lys Val Leu Gly Thr Phe Glu
                165                 170                 175
Phe Asp Glu Thr Ser Phe Trp Asn Ser Ser His Pro Arg Gly Trp Asn
            180                 185                 190
Asp His Val His Ile Leu Asp Thr Glu Thr Phe Thr Trp Ser Gln Pro
        195                 200                 205
Ile Thr Thr Gly Lys Ala Pro Ser Pro Arg Ala Ala His Ala Cys Ala
    210                 215                 220
Thr Val Gly Asn Arg Gly Phe Val Phe Gly Gly Arg Tyr Arg Asp Ala
225                 230                 235                 240
Arg Met Asn Asp Leu His Tyr Leu Asn Leu Asp Thr Trp Glu Trp Asn
                245                 250                 255
Glu Leu Ile Pro Gln Gly Ile Cys Pro Val Gly Arg Ser Trp His Ser
            260                 265                 270
Leu Thr Pro Val Ser Ser Asp His Leu Phe Leu Phe Gly Gly Phe Thr
        275                 280                 285
Thr Asp Lys Gln Pro Leu Ser Asp Ala Trp Thr Tyr Cys Ile Ser Lys
    290                 295                 300
Asn Glu Trp Ile Gln Phe Asn His Pro Tyr Thr Glu Lys Pro Arg Leu
305                 310                 315                 320
Trp His Thr Ala Cys Ala Ser Asp Glu Gly Glu Val Ile Val Phe Gly
                325                 330                 335
Gly Cys Ala Asn Asn Leu Leu Val His His Arg Ala Ala His Ser Asn
            340                 345                 350
Glu Ile Leu Ile Phe Ser Val Gln Pro Lys Ser Leu Val Arg Leu Ser
        355                 360                 365
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Leu Glu Ala Val Ile Cys Phe Lys Glu Met Leu Ala Asn Ser Trp Asn
370 375 380
Cys Leu Pro Lys His Leu Leu His Ser Val Asn Gln Arg Phe Gly Ser
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Asn Asn Thr Ser Gly Ser
405

<210> 12409
<211> 1805
<212> DNA
<213> Homo sapiens

0050250-050250

<400> 12409
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tattttgtag cagactcgtg cccccattag tgtgcctctt tggaaattat cgcccacatt 180
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ctttttttt tttaataaaa aggttgaact gttttttttt tttttctttt tggtattaag 300
tccatcttgt gttggtacat tggcagagac atatgcttta aaaacttaaa tatttcggag 360
gcacatgttg gactactttg ttttaattaa actgctagta tttctttgtc aaggatgttt 420
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tcaaactaag caggtactca tgccaggtac tcctttctct acccacatcc atgtttgaat 660
gctattgcct gtgatcttta cgcttaactg ttgtgtatct tttttgttct ttacaagaag 720
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<210> 12410

<211> 1562
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (205)..(1092)

<400> 12410
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gctctatcta atgttcctcc tctccggaac tactttctgg aagaagacaa ttataagaac 180
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gcagttgtac tttgcagtaa gaagactttt cagatcacca aacaaggaga tggcgttgac 360
tttctgtctt ggtttctgaa tgctctgcac tcagctctgg ggggcacaaa gaagaaaaag 420
aagactattg tgactgatgt tttccagggg tccatgagga tcttcactaa aaagcttccc 480
catcctgatc tgccagcaga agaaaaagag cagttgctcc ataatgacga gtaccaggag 540
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cagcttacca agttgcctcc atatctaatc ttttgtatca agagattcac taagaacaac 780
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tt 1562

<210> 12411
<211> 296
<212> PRT
<213> Homo sapiens

<400> 12411
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09/05/2005 09:50:00

Ala Val Val Leu Cys Ser Lys Lys Thr Phe Gln Ile Thr Lys Gln Gly
35 40 45
Asp Gly Val Asp Phe Leu Ser Trp Phe Leu Asn Ala Leu His Ser Ala
50 55 60
Leu Gly Gly Thr Lys Lys Lys Lys Lys Thr Ile Val Thr Asp Val Phe
65 70 75 80
Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu Pro His Pro Asp Leu
85 90 95
Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn Asp Glu Tyr Gln Glu
100 105 110
Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr Leu Asp Leu Pro Thr
115 120 125
Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu Ile Ile Pro Gln Val
130 135 140
Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly Ile Thr Glu Lys Glu
145 150 155 160
Tyr Lys Thr Tyr Lys Glu Asn Phe Leu Lys Arg Phe Gln Leu Thr Lys
165 170 175
Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg Phe Thr Lys Asn Asn
180 185 190
Phe Phe Val Glu Lys Asn Pro Thr Ile Val Asn Phe Pro Ile Thr Asn
195 200 205
Val Asp Leu Arg Glu Tyr Leu Ser Glu Glu Val Gln Ala Val His Lys
210 215 220
Asn Thr Thr Tyr Asp Leu Ile Ala Asn Ile Val His Asp Gly Lys Pro
225 230 235 240
Ser Glu Gly Ser Tyr Arg Ile His Val Leu His His Gly Thr Gly Lys
245 250 255
Trp Tyr Glu Leu Gln Asp Leu Gln Val Thr Asp Ile Leu Pro Gln Met
260 265 270
Ile Thr Leu Ser Glu Ala Tyr Ile Gln Ile Trp Lys Arg Arg Asp Asn
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Asp Glu Thr Asn Gln Gln Gly Ala
290 295

<210> 12412
<211> 2402
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (6)..(1325)

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0538045.0538045

0002280.0002460

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atccaaacat tgaccctgaa actgaccctt acgtcactcc tggcagtgtc ataaacaatc 360
tttcaattaa tactgtgcgg gaagttgacc acctcaggga caggaacagt gggtcatcct 420
catccttgaa caccacgctg ccttcaacta gtgcctggtc atccattcgt gcctccaact 480
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<210> 12413
<211> 440
<212> PRT
<213> Homo sapiens

<400> 12413
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0050250-0050250

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Ser Lys His Gly Ala Ile Ser Ser Gly Phe Arg Leu Glu Glu Ser Pro
        35                  40                  45
Phe Val Pro Tyr Asp Phe Met Asn Ser Ser Thr Ser Pro Ala Ser Pro
    50                  55                  60
Pro Gly Ser Ile Gly Asp Gly Trp Pro Arg Ala Lys Ser Pro Asn Gly
65                  70                  75                  80
Ser Ser Ser Val Asn Trp Pro Pro Glu Phe Arg Pro Gly Glu Pro Trp
                85                  90                  95
Lys Gly Tyr Pro Asn Ile Asp Pro Glu Thr Asp Pro Tyr Val Thr Pro
            100                 105                 110
Gly Ser Val Ile Asn Asn Leu Ser Ile Asn Thr Val Arg Glu Val Asp
        115                 120                 125
His Leu Arg Asp Arg Asn Ser Gly Ser Ser Ser Ser Leu Asn Thr Thr
    130                 135                 140
Leu Pro Ser Thr Ser Ala Trp Ser Ser Ile Arg Ala Ser Asn Tyr Asn
145                 150                 155                 160
Val Pro Leu Ser Ser Thr Ala Gln Ser Thr Ser Ala Arg Asn Ser Asp
                165                 170                 175
Ser Lys Leu Thr Trp Phe Pro Gly Ser Val Thr Asn Thr Ser Leu Ala
            180                 185                 190
His Glu Leu Trp Lys Val Pro Leu Pro Pro Lys Asn Ile Thr Ala Pro
        195                 200                 205
Ser Arg Pro Pro Pro Gly Leu Thr Gly Gln Lys Pro Pro Leu Ser Thr
    210                 215                 220
Trp Asp Asn Ser Pro Leu Arg Ile Gly Gly Gly Trp Gly Asn Ser Asp
225                 230                 235                 240
Ala Arg Tyr Thr Pro Gly Ser Ser Trp Gly Glu Ser Ser Ser Gly Arg
                245                 250                 255
Ile Thr Asn Trp Leu Val Leu Lys Asn Leu Thr Pro Gln Ile Asp Gly
            260                 265                 270
Ser Thr Leu Arg Thr Leu Cys Met Gln His Gly Pro Leu Ile Thr Phe
        275                 280                 285
His Leu Asn Leu Pro His Gly Asn Ala Leu Val Arg Tyr Ser Ser Lys
    290                 295                 300
Glu Glu Val Val Lys Ala Gln Lys Ser Leu His Met Cys Val Leu Gly
305                 310                 315                 320
Asn Thr Thr Ile Leu Ala Glu Phe Ala Ser Glu Glu Glu Ile Ser Arg
                325                 330                 335
Phe Phe Ala Gln Ser Gln Ser Leu Thr Pro Ser Pro Gly Trp Gln Ser
            340                 345                 350
Leu Gly Ser Ser Gln Ser Arg Leu Gly Ser Leu Asp Cys Ser His Ser
        355                 360                 365
Phe Ser Ser Arg Thr Asp Leu Asn His Trp Asn Gly Ala Gly Leu Ser
    370                 375                 380
Gly Thr Asn Cys Gly Asp Leu His Gly Thr Ser Leu Trp Gly Thr Pro
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385                 390                 395                 400
His Tyr Ser Thr Ser Leu Trp Gly Pro Pro Ser Ser Ser Asp Pro Arg
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Gly Ile Ser Ser Pro Ser Pro Ile Asn Ala Phe Leu Ser Val Asp His
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Leu Gly Gly Gly Gly Glu Ser Met
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<210> 12414
<211> 1640
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (21)..(1391)

<400> 12414

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aagggctgtg tgtaaacact gaccctgtct caattctaac aagcatttta gacatgagtt 1560
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<210> 12415
<211> 457
<212> PRT
<213> Homo sapiens

<400> 12415

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            20                  25                  30
Thr Glu Arg Phe Asn Pro His Asp Ile Arg Leu Ile Leu Ser Asp Asp
        35                  40                  45
Val Leu Met Glu Lys Tyr Glu Glu Phe Met Leu Arg Arg Trp Leu Val
    50                  55                  60
Ala Asp Pro Asp Cys Arg Trp Cys Pro Ala Pro Asp Cys Gly Tyr Ala
65                  70                  75                  80
Val Ile Ala Phe Gly Cys Ala Ser Cys Pro Lys Leu Thr Cys Gly Arg
                85                  90                  95
Glu Gly Cys Gly Thr Glu Phe Cys Tyr His Cys Lys Gln Ile Trp His
            100                 105                 110
Pro Asn Gln Thr Cys Asp Ala Ala Arg Gln Glu Arg Ala Gln Ser Leu
        115                 120                 125
Arg Leu Arg Thr Ile Arg Ser Ser Ser Ile Ser Tyr Ser Gln Glu Ser
    130                 135                 140
Gly Ala Ala Ala Asp Asp Ile Lys Pro Cys Pro Arg Cys Ala Ala Tyr
145                 150                 155                 160
Ile Ile Lys Met Asn Asp Gly Ser Cys Asn His Met Thr Cys Ala Val
                165                 170                 175
Cys Gly Cys Glu Phe Cys Trp Leu Cys Met Lys Glu Ile Ser Asp Leu
            180                 185                 190
His Tyr Leu Ser Pro Ser Gly Cys Thr Phe Trp Gly Lys Lys Pro Trp
        195                 200                 205
Ser Arg Lys Lys Lys Ile Leu Trp Gln Leu Gly Thr Leu Val Gly Ala
    210                 215                 220
Pro Val Gly Ile Ala Leu Ile Ala Gly Ile Ala Ile Pro Ala Met Ile
225                 230                 235                 240
Ile Gly Ile Pro Val Tyr Val Gly Arg Lys Ile His Asn Arg Tyr Glu
                245                 250                 255
Gly Lys Asp Val Ser Lys His Lys Arg Asn Leu Ala Ile Ala Gly Gly
            260                 265                 270
Val Thr Leu Ser Val Ile Val Ser Pro Val Val Ala Ala Val Thr Val
        275                 280                 285
Gly Ile Gly Val Pro Ile Met Leu Ala Tyr Val Tyr Gly Val Val Pro
    290                 295                 300
Ile Ser Leu Cys Arg Ser Gly Gly Cys Gly Val Ser Ala Gly Asn Gly
305                 310                 315                 320
Lys Gly Val Arg Ile Glu Phe Asp Asp Glu Asn Asp Ile Asn Val Gly
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0950450-0950800

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            340                 345                 350
Asn Pro Ser Ile Gly Glu Gly Ser Val Gly Gly Leu Thr Gly Ser Leu
        355                 360                 365
Ser Ala Ser Gly Ser His Met Asp Arg Ile Gly Ala Ile Arg Asp Asn
    370                 375                 380
Leu Ser Glu Thr Ala Ser Thr Met Ala Leu Ala Gly Ala Ser Ile Thr
385                 390                 395                 400
Gly Ser Leu Ser Gly Ser Ala Met Val Asn Cys Phe Asn Arg Leu Glu
                405                 410                 415
Val Gln Ala Asp Val Gln Lys Glu Ala Ala Val Ala Ala Ala Gly Arg
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Trp Ala Tyr Ser Pro Ala Thr Leu Arg Cys Arg Arg Ser Glu Glu Leu
        435                 440                 445
Lys Asn Ile His Asp Ser Ser Leu Leu
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<210> 12416
<211> 1696
<212> DNA
<213> Homo sapiens

<400> 12416

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (45)..(581)

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<212> PRT
<213> Homo sapiens

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35 40 45
Asp Pro Glu Leu Glu Lys Ile Arg Arg Glu Arg Asn Tyr Ser Trp Met
50 55 60
Asp Ile Ile Thr Ile Cys Lys Asp Lys Leu Pro Asn Tyr Glu Glu Lys
65 70 75 80
Ile Lys Met Phe Tyr Glu Glu His Leu His Leu Asp Asp Glu Ile Arg
85 90 95
Tyr Ile Leu Asp Gly Ser Gly Tyr Phe Asp Val Arg Asp Lys Glu Asp
100 105 110
Gln Trp Ile Arg Ile Phe Met Glu Lys Gly Asp Met Val Thr Leu Pro
115 120 125
Ala Gly Ile Tyr His Arg Phe Thr Val Asp Glu Lys Asn Tyr Thr Lys
130 135 140
Ala Met Arg Leu Phe Val Gly Glu Pro Val Trp Thr Ala Tyr Asn Arg
145 150 155 160
Pro Ala Asp His Phe Glu Ala Arg Gly Gln Tyr Val Lys Phe Leu Ala
165 170 175
Gln Thr Ala

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<211> 1635
<212> DNA
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<220>
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cgggggaggc ggccaccagc ccggcggagg agacagtggt gtggagcccc gaggtggagg 180
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tgatttgtat tcgggacaag ttcagccaga acatcgggcg gcaggtccca tccaaggtca 300
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cattcccgaa tccagagagg aacttcgtcc ttccagaaga gatcattcag gaggtccgag 420
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<212> PRT
<213> Homo sapiens

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35 40 45
Val Gly Val Asn Arg His Phe His Met Ile Cys Ile Arg Asp Lys Phe
50 55 60
Ser Gln Asn Ile Gly Arg Gln Val Pro Ser Lys Val Ile Trp Asp His
65 70 75 80
Leu Ser Thr Met Tyr Asp Met Gln Ala Leu His Glu Ser Glu Ile Leu
85 90 95
Pro Phe Pro Asn Pro Glu Arg Asn Phe Val Leu Pro Glu Glu Ile Ile
100 105 110
Gln Glu Val Arg Glu Gly Lys Val Met Ile Glu Glu Glu Met Lys Glu
115 120 125
Glu Met Lys Glu Asp Val Asp Pro His Asn Gly Ala Asp Asp Val Phe
130 135 140

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Lys Glu Lys Asn Ser Ser Asp Leu Gly Cys Lys Glu Gly Ala Asp Lys
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Arg Lys Arg Ser Arg Val Thr Asp Lys Val Leu Thr Ala Asn Ser Asn
180 185 190
Pro Ser Ser Pro Ser Ala Ala Lys Arg Arg Arg Thr
195 200

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<211> 2082
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (13)..(1908)

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<210> 12422
<211> 632
<212> PRT
<213> Homo sapiens

<400> 12422

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Val	Leu	Tyr	Gln	Leu	Ala	His	Thr	Leu	Pro	Phe	Ala	Arg	Gly	Val	Ser
		35					40					45			
Ala	His	Leu	Asp	Lys	Ala	Ser	Ile	Met	Arg	Leu	Thr	Ile	Ser	Tyr	Leu
	50					55					60				
Arg	Met	His	Arg	Leu	Cys	Ala	Ala	Gly	Glu	Trp	Asn	Gln	Val	Gly	Ala
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Gly	Gly	Glu	Pro	Leu	Asp	Ala	Cys	Tyr	Leu	Lys	Ala	Leu	Glu	Gly	Phe
				85					90					95	
Val	Met	Val	Leu	Thr	Ala	Glu	Gly	Asp	Met	Ala	Tyr	Leu	Ser	Glu	Asn
			100					105					110		
Val	Ser	Lys	His	Leu	Gly	Leu	Ser	Gln	Leu	Glu	Leu	Ile	Gly	His	Ser
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Ile	Phe	Asp	Phe	Ile	His	Pro	Cys	Asp	Gln	Glu	Glu	Leu	Gln	Asp	Ala
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145					150					155					160
Glu	Arg	Cys	Phe	Ser	Leu	Arg	Met	Lys	Ser	Thr	Leu	Thr	Ser	Arg	Gly
				165					170					175	
Arg	Thr	Leu	Asn	Leu	Lys	Ala	Ala	Thr	Trp	Lys	Val	Leu	Asn	Cys	Ser
			180					185					190		
Gly	His	Met	Arg	Ala	Tyr	Lys	Pro	Pro	Val	Gln	Thr	Ser	Pro	Ala	Gly
		195					200					205			
Ser	Pro	Asp	Ser	Glu	Pro	Pro	Leu	Gln	Cys	Leu	Val	Leu	Ile	Cys	Glu
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Ala	Ile	Pro	His	Pro	Gly	Ser	Leu	Glu	Pro	Pro	Leu	Gly	Arg	Gly	Ala
225					230					235					240
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Thr Val Val Ser Gly Gly Arg Gly Pro Gln Ser Glu Ser Ile Val Cys
                325                 330                 335
Val His Phe Leu Ile Ser Gln Val Glu Glu Thr Gly Val Val Leu Ser
            340                 345                 350
Leu Glu Gln Thr Glu Gln His Ser Arg Arg Pro Ile Gln Arg Gly Ala
        355                 360                 365
Pro Ser Gln Lys Asp Thr Pro Asn Pro Gly Asp Ser Leu Asp Thr Pro
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Gly Pro Arg Ile Leu Ala Phe Leu His Pro Pro Ser Leu Ser Glu Ala
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Ala Leu Ala Ala Asp Pro Arg Arg Phe Cys Ser Pro Asp Leu Arg Arg
                405                 410                 415
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Thr Pro Leu Ala Thr Arg His Pro Gln Ser Pro Leu Ser Ala Asp Leu
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Pro Asp Glu Leu Pro Val Gly Thr Glu Asn Val His Arg Leu Phe Thr
    450                 455                 460
Ser Gly Lys Asp Thr Glu Ala Val Glu Thr Asp Leu Asp Ile Ala Gln
465                 470                 475                 480
Asp Ala Asp Ala Leu Asp Leu Glu Met Leu Ala Pro Tyr Ile Ser Met
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Gly Asp Asp Phe Gln Leu Asn Ala Ser Glu Gln Leu Pro Arg Ala Tyr
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His Arg Pro Leu Gly Ala Val Pro Arg Pro Arg Ala Arg Ser Phe His
        515                 520                 525
Gly Leu Ser Pro Pro Ala Leu Glu Pro Ser Leu Leu Pro Arg Trp Gly
    530                 535                 540
Ser Asp Pro Arg Leu Ser Cys Ser Ser Pro Ser Arg Gly Asp Pro Ser
545                 550                 555                 560
Ala Ser Ser Pro Met Ala Gly Ala Arg Lys Arg Thr Leu Ala Gln Ser
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Ser Glu Asp Glu Asp Glu Gly Val Glu Leu Leu Gly Val Arg Pro Pro
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Lys Arg Ser Pro Ser Pro Glu His Glu Asn Phe Leu Leu Phe Pro Leu
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Ser Leu Val Cys Trp Gly Ile Asn Gly Ile Leu Trp Pro Ser Leu Pro
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<211> 1842
<212> DNA
<213> Homo sapiens

<220>
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<222> (147)..(1469)

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<212> PRT
<213> Homo sapiens

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<400> 12424

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Lys Phe Val Asn Arg Ser Pro Ser Pro Phe His Ala Val Ala Glu Cys
        35                  40                  45
Arg Asn Arg Leu Leu Gln Ala Gly Phe Ser Glu Leu Lys Glu Thr Glu
    50                  55                  60
Lys Trp Asn Ile Lys Pro Glu Ser Lys Tyr Phe Met Thr Arg Asn Ser
65                  70                  75                  80
Ser Thr Ile Ile Ala Phe Ala Val Gly Gly Gln Tyr Val Pro Gly Asn
                85                  90                  95
Gly Phe Ser Leu Ile Gly Ala His Thr Asp Ser Pro Cys Leu Arg Val
            100                 105                 110
Lys Arg Arg Ser Arg Arg Ser Gln Val Gly Phe Gln Gln Val Gly Val
        115                 120                 125
Glu Thr Tyr Gly Gly Gly Ile Trp Ser Thr Trp Phe Asp Arg Asp Leu
    130                 135                 140
Thr Leu Ala Gly Arg Val Ile Val Lys Cys Pro Thr Ser Gly Arg Leu
145                 150                 155                 160
Glu Gln Gln Leu Val His Val Glu Arg Pro Ile Leu Arg Ile Pro His
                165                 170                 175
Leu Ala Ile His Leu Gln Arg Asn Ile Asn Glu Asn Phe Gly Pro Asn
            180                 185                 190
Thr Glu Met His Leu Val Pro Ile Leu Ala Thr Ala Ile Gln Glu Glu
        195                 200                 205
Leu Glu Lys Gly Thr Pro Glu Pro Gly Pro Leu Asn Ala Val Asp Glu
    210                 215                 220
Arg His His Ser Val Leu Met Ser Leu Leu Cys Ala His Leu Gly Leu
225                 230                 235                 240
Ser Pro Lys Asp Ile Val Glu Met Glu Leu Cys Leu Ala Asp Thr Gln
                245                 250                 255
Pro Ala Val Leu Gly Gly Ala Tyr Asp Glu Phe Ile Phe Ala Pro Arg
            260                 265                 270
Leu Asp Asn Leu His Ser Cys Phe Cys Ala Leu Gln Ala Leu Ile Asp
        275                 280                 285
Ser Cys Ala Gly Pro Gly Ser Leu Ala Thr Glu Pro His Val Arg Met
    290                 295                 300
Val Thr Leu Tyr Asp Asn Glu Glu Val Gly Ser Glu Ser Ala Gln Gly
305                 310                 315                 320
Ala Gln Ser Leu Leu Thr Glu Leu Val Leu Arg Arg Ile Ser Ala Ser
                325                 330                 335
Cys Gln His Pro Thr Ala Phe Glu Glu Ala Ile Pro Lys Ser Phe Met
            340                 345                 350
Ile Ser Ala Asp Met Ala His Ala Val His Pro Asn Tyr Leu Asp Lys
        355                 360                 365
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His Glu Glu Asn His Arg Pro Leu Phe His Lys Gly Pro Val Ile Lys
    370                 375                 380
Val Asn Ser Lys Gln Arg Tyr Ala Ser Asn Ala Val Ser Glu Ala Leu
385                 390                 395                 400
Ile Arg Glu Val Ala Asn Lys Ala Arg Ser Pro Cys Arg Ile Ser Trp
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Ser Gly Met Thr Pro Pro Val Glu Pro Pro Leu Asp Leu Ser Trp Leu
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Leu Gly Trp Gly Cys Gly Cys Trp Ile
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<210> 12425
<211> 1847
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (102)..(1790)

<400> 12425

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US 2005/0095644 A1

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<211> 563
<212> PRT
<213> Homo sapiens

<400> 12426
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20 25 30
Glu Arg Leu Arg Thr Ile Tyr Asn Arg Asp Phe Lys Ile Ser Phe Gly
35 40 45
Thr Pro Ala Pro Gly Phe Ser Ser Met Leu Tyr Gly Met Lys Ile Ala
50 55 60
Asn Leu Ala Tyr Val Thr Lys Thr Arg Val Arg Phe Phe Arg Leu Asp
65 70 75 80
Arg Trp Ala Asp Val Arg Phe Pro Glu Lys Arg Arg Met Lys Leu Gly
85 90 95
Ser Asp Ile Ser Lys His His Lys Ser Leu Leu Ala Lys Ile Phe Tyr
100 105 110
Asp Arg Ala Glu Tyr Leu His Gly Lys His Gly Val Asp Val Glu Val
115 120 125
Gln Gly Pro His Glu Ala Arg Asp Gly Gln Leu Leu Ile Arg Leu Asp
130 135 140
Leu Asn Arg Lys Glu Val Leu Thr Leu Arg Leu Arg Asn Gly Gly Thr
145 150 155 160
Gln Ser Val Thr Leu Thr His Leu Phe Pro Leu Cys Arg Thr Pro Gln
165 170 175
Phe Ala Phe Tyr Asn Glu Asp Gln Glu Leu Pro Cys Pro Leu Gly Pro
180 185 190
Gly Glu Cys Tyr Glu Leu His Val His Cys Lys Thr Ser Phe Val Gly
195 200 205
Tyr Phe Pro Ala Thr Val Leu Trp Glu Leu Leu Gly Pro Gly Glu Ser
210 215 220
Gly Ser Glu Gly Ala Gly Thr Phe Tyr Ile Ala Arg Phe Leu Ala Ala
225 230 235 240
Val Ala His Ser Pro Leu Ala Ala Gln Leu Lys Pro Met Thr Pro Phe
245 250 255
Lys Arg Thr Arg Ile Thr Gly Asn Pro Val Val Thr Asn Arg Ile Glu
260 265 270
Glu Gly Glu Arg Pro Asp Arg Ala Lys Gly Tyr Asp Leu Glu Leu Ser

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Met Ala Leu Gly Thr Tyr Tyr Pro Pro Pro Arg Leu Arg Gln Leu Leu
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Pro Met Leu Leu Gln Gly Thr Ser Ile Phe Thr Ala Pro Lys Glu Ile
305                 310                 315                 320
Ala Glu Ile Lys Ala Gln Leu Glu Thr Ala Leu Lys Trp Arg Asn Tyr
                325                 330                 335
Glu Val Lys Leu Arg Leu Leu Leu His Leu Glu Glu Leu Gln Met Glu
            340                 345                 350
His Asp Ile Arg His Tyr Asp Leu Glu Ser Val Pro Met Thr Trp Asp
        355                 360                 365
Pro Val Asp Gln Asn Pro Arg Leu Leu Thr Leu Glu Val Pro Gly Val
    370                 375                 380
Thr Glu Ser Arg Pro Ser Val Leu Arg Gly Asp His Leu Phe Ala Leu
385                 390                 395                 400
Leu Ser Ser Glu Thr His Gln Glu Asp Pro Ile Thr Tyr Lys Gly Phe
                405                 410                 415
Val His Lys Val Glu Leu Asp Arg Val Lys Leu Ser Phe Ser Met Ser
            420                 425                 430
Leu Leu Ser Arg Phe Val Asp Gly Leu Thr Phe Lys Val Asn Phe Thr
        435                 440                 445
Phe Asn Arg Gln Pro Leu Arg Val Gln His Arg Ala Leu Glu Leu Thr
    450                 455                 460
Gly Arg Trp Leu Leu Trp Pro Met Leu Phe Pro Val Ala Pro Arg Asp
465                 470                 475                 480
Val Pro Leu Leu Pro Ser Asp Val Lys Leu Lys Leu Tyr Asp Arg Ser
                485                 490                 495
Leu Glu Ser Asn Pro Glu Gln Leu Gln Ala Met Arg His Ile Val Thr
            500                 505                 510
Gly Thr Thr Arg Pro Ala Leu Thr Ala Cys Leu Thr Leu Asn Gln Asn
        515                 520                 525
Pro Ala Glu Leu Pro Leu Gln Gly Thr Gly Arg Leu Gly Glu Gly Val
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Tyr Asn Pro Ser His Ser Thr Pro Ser Pro Ala Gly Glu Asn Asp Thr
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Ser Ser Cys
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (290)..(1084)

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gttcctgcag tacttcctgg agaagaggga gaagcacgtc actgtggttg taggaacatc 240
tggggacaca ggaagtgctg ccattgagag tgttcaaggg gcaaagaaca tggacattat 300
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gaagcagaac gtacatgtgt ttggagtgga gggaaacagc gatgagctcg atgagccgat 420
caagactgtg tttgccgatg tggcttttgt caagataggc ctgcccatcc gtctggtcgt 480
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gagggtgttc tggctgctct ctggctctga cagccaggtg acaagagccc tcatggagca 660
gtttgaaagg acccaaagtg tgaatctgcc caaggaactg cacagcaagc tttcagaggc 720
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<210> 12428
<211> 265
<212> PRT
<213> Homo sapiens

<400> 12428
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Val Glu Gly Asn Ser Asp Glu Leu Asp Glu Pro Ile Lys Thr Val Phe
35 40 45
Ala Asp Val Ala Phe Val Lys Ile Gly Leu Pro Ile Arg Leu Val Val
50 55 60
Ala Val Asn Arg Asn Asp Ile Ile His Arg Thr Val Gln Gln Gly Asp
65 70 75 80
Phe Ser Leu Ser Glu Ala Val Lys Ser Thr Leu Ala Ser Ala Met Asp
85 90 95

Ile Gln Val Pro Tyr Asn Met Glu Arg Val Phe Trp Leu Leu Ser Gly
100 105 110
Ser Asp Ser Gln Val Thr Arg Ala Leu Met Glu Gln Phe Glu Arg Thr
115 120 125
Gln Ser Val Asn Leu Pro Lys Glu Leu His Ser Lys Leu Ser Glu Ala
130 135 140
Val Thr Ser Val Ser Val Ser Asp Glu Ala Ile Thr Gln Thr Met Gly
145 150 155 160
Arg Cys Trp Asp Glu Asn Gln Tyr Leu Leu Cys Pro His Ser Ala Val
165 170 175
Ala Val Asn Tyr His Tyr Gln Gln Ile Asp Arg Gln Gln Pro Ser Thr
180 185 190
Pro Arg Cys Cys Leu Ala Pro Ala Ser Ala Ala Lys Phe Pro Glu Ala
195 200 205
Val Leu Ala Ala Gly Leu Thr Pro Glu Thr Pro Ala Glu Ile Val Ala
210 215 220
Leu Glu His Lys Glu Thr Arg Cys Thr Leu Met Arg Arg Gly Asp Asn
225 230 235 240
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Arg Ser His Ala Leu Asn Thr Ser Gln
260 265

<210> 12429
<211> 1604
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (185)..(934)

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US 09/505,050 - 02/25/2000

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agctaaaatt gtatgtaatc aataaaacca ctcttatgtt tatt 1604

<210> 12430
<211> 250
<212> PRT
<213> Homo sapiens

<400> 12430

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			20					25				30			
Lys	Asn	Lys	Val	Val	Gly	Trp	Arg	Ser	Gly	Val	Glu	Lys	Asp	Leu	Asp
		35					40					45			
Glu	Val	Leu	Gln	Thr	His	Ser	Val	Phe	Val	Asn	Val	Ser	Lys	Gly	Gln
	50					55					60				
Val	Ala	Lys	Lys	Glu	Asp	Leu	Ile	Ser	Ala	Phe	Gly	Thr	Asp	Asp	Gln
65					70					75					80
Thr	Glu	Ile	Cys	Lys	Gln	Ile	Leu	Thr	Lys	Gly	Glu	Val	Gln	Val	Ser
				85					90					95	
Asp	Lys	Glu	Arg	His	Thr	Gln	Leu	Glu	Gln	Met	Phe	Arg	Asp	Ile	Ala
			100					105					110		
Thr	Ile	Val	Ala	Asp	Lys	Cys	Val	Asn	Pro	Glu	Thr	Lys	Arg	Pro	Tyr
		115					120					125			
Thr	Val	Ile	Leu	Ile	Glu	Arg	Ala	Met	Lys	Asp	Ile	His	Tyr	Ser	Val
	130					135					140				
Lys	Thr	Asn	Lys	Ser	Thr	Lys	Gln	Gln	Ala	Leu	Glu	Val	Ile	Lys	Gln
145					150					155					160
Leu	Lys	Glu	Lys	Met	Lys	Ile	Glu	Arg	Ala	His	Met	Arg	Leu	Arg	Phe
				165					170					175	
Ile	Leu	Pro	Val	Asn	Glu	Gly	Lys	Lys	Leu	Lys	Glu	Lys	Leu	Lys	Pro
			180					185					190		
Leu	Ile	Lys	Val	Ile	Glu	Ser	Glu	Asp	Tyr	Gly	Gln	Gln	Leu	Glu	Ile
		195					200					205			
Val	Cys	Leu	Ile	Asp	Pro	Gly	Cys	Phe	Arg	Glu	Ile	Asp	Glu	Leu	Ile

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225                 230                 235                 240
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<210> 12431
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (462)..(1598)

<400> 12431

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<211> 379
<212> PRT
<213> Homo sapiens

<400> 12432

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        35                  40                  45
Pro Ser Arg Gln Gly Arg Arg Glu Val Arg Phe Ser Asp Glu Pro Pro
    50                  55                  60
Glu Val Tyr Gly Asp Phe Glu Pro Leu Val Ala Lys Glu Arg Ser Pro
65                  70                  75                  80
Val Gly Lys Arg Thr Arg Leu Glu Glu Phe Arg Ser Asp Ser Ala Lys
                85                  90                  95
Glu Glu Val Arg Glu Ser Ala Tyr Tyr Leu Arg Ser Arg Gln Arg Arg
            100                 105                 110
Gln Pro Arg Pro Gln Glu Thr Glu Glu Met Lys Thr Arg Arg Thr Thr
        115                 120                 125
Arg Leu Gln Gln Gln His Ser Glu Gln Pro Pro Leu Gln Pro Ser Pro
    130                 135                 140
Val Met Thr Arg Arg Gly Leu Arg Asp Ser His Ser Ser Glu Glu Asp
145                 150                 155                 160
Glu Ala Ser Ser Gln Thr Asp Leu Ser Gln Thr Ile Ser Lys Lys Thr
                165                 170                 175
Val Arg Ser Ile Gln Glu Ala Pro Ala Val Ser Glu Asp Leu Val Ile
            180                 185                 190
Arg Leu Arg Arg Pro Pro Leu Arg Tyr Pro Arg Tyr Glu Ala Thr Ser
        195                 200                 205
Val Gln Gln Lys Val Asn Phe Ser Glu Glu Gly Glu Thr Glu Glu Asp
    210                 215                 220
Asp Gln Asp Ser Ser His Ser Ser Val Thr Thr Val Lys Ala Arg Ser
225                 230                 235                 240
Arg Asp Ser Asp Glu Ser Gly Asp Lys Thr Thr Arg Ser Ser Ser Gln
                245                 250                 255
Tyr Ile Glu Ser Phe Trp Gln Ser Ser Gln Ser Gln Asn Phe Thr Ala
            260                 265                 270
His Asp Lys Gln Pro Ser Val Leu Ser Ser Gly Ser Thr Leu Ile Phe
        275                 280                 285
Tyr Lys Tyr Cys Asp His Glu Asn Ala Ala Phe Lys Asp Val Ala Leu
    290                 295                 300
Val Leu Thr Val Leu Leu Glu Glu Glu Thr Leu Gly Thr Ser Leu Gly
305                 310                 315                 320
Leu Lys Glu Val Glu Glu Lys Val Arg Asp Phe Leu Lys Val Lys Phe
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                325                 330                 335
Thr Asn Ser Asn Thr Pro Asn Ser Tyr Asn His Met Asp Pro Asp Lys
            340                 345                 350
Leu Asn Gly Leu Trp Ser Arg Ile Ser His Leu Val Leu Pro Val Gln
        355                 360                 365
Pro Glu Asn Ala Leu Lys Arg Gly Ile Cys Leu
    370                 375
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<210> 12433
<211> 2388
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (87)..(641)

<400> 12433

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aatatacctc cattgccctg gtgtctgtgg ggatatttat ttgcactttt atgtcagcaa 300
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<212> PRT
<213> Homo sapiens

<400> 12434

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             20                  25                  30
Leu Ile Ala Asn Met Ile Leu Gly Ile Ile Ile Leu Lys Lys Arg Tyr
         35                  40                  45
Ser Ile Phe Lys Tyr Thr Ser Ile Ala Leu Val Ser Val Gly Ile Phe
     50                  55                  60
Ile Cys Thr Phe Met Ser Ala Lys Gln Val Thr Ser Gln Ser Ser Leu
 65                  70                  75                  80
Ser Glu Asn Asp Gly Phe Gln Ala Phe Val Trp Trp Leu Leu Gly Ile
                 85                  90                  95
Gly Ala Leu Thr Phe Ala Leu Leu Met Ser Ala Arg Met Gly Ile Phe
            100                 105                 110
Gln Glu Thr Leu Tyr Lys Arg Phe Gly Lys His Ser Lys Glu Ala Leu
        115                 120                 125
Phe Tyr Asn His Ala Leu Pro Leu Pro Gly Phe Val Phe Leu Ala Ser
    130                 135                 140
Asp Ile Tyr Asp His Ala Val Leu Phe Asn Lys Ser Glu Leu Tyr Glu
145                 150                 155                 160
Ile Pro Val Ile Gly Val Thr Leu Pro Ile Met Trp Phe Tyr Leu Leu
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<212> DNA

<213> Homo sapiens

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gatgtccatt ggaagcattt atttggaact ttttgggggt ggaaggaaag ttaattaatt 600
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<212> DNA
<213> Homo sapiens

<220>
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<222> (522)..(1202)

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<211> 227
<212> PRT
<213> Homo sapiens

<400> 12437
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35 40 45
Leu Leu Ser Lys Ala Glu Arg Ala Thr Glu Leu Ala Ala Glu Gly Gln
50 55 60
Leu Thr Leu Gln Gln Phe Ala Gln Ser Thr Glu Met Leu Lys Arg Val
65 70 75 80
Val Gln Glu His Leu Pro Leu Met Ser Glu Ala Gly Ala Gly Leu Pro
85 90 95
Asp Met Glu Ala Val Ala Gly Ala Glu Ala Leu Asn Gly Gln Ser Asp
100 105 110
Phe Pro Tyr Leu Gly Ala Phe Pro Ile Asn Pro Gly Leu Phe Ile Met
115 120 125
Thr Pro Ala Gly Val Phe Leu Ala Glu Ser Ala Leu His Met Ala Gly
130 135 140

09/02/2008 09:56:05

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Gly Lys Lys Lys Arg Lys Arg Cys Gly Met Cys Ala Pro Cys Arg Arg
165 170 175
Arg Ile Asn Cys Glu Gln Cys Ser Ser Cys Arg Asn Arg Lys Thr Gly
180 185 190
His Gln Ile Cys Lys Phe Arg Lys Cys Glu Glu Leu Lys Lys Lys Pro
195 200 205
Ser Ala Ala Leu Glu Lys Val Met Leu Pro Thr Gly Ala Ala Phe Arg
210 215 220
Trp Phe Gln
225

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (111)..(839)

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ctgtttcaac accatcaaaa gaatacactt ctgcagtaac tgagcttgtc aaagatgatg 360
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<211> 243
<212> PRT
<213> Homo sapiens

<400> 12439
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20 25 30
Gln Ile Gly Phe Glu Ile Pro Arg Ile Leu Ala Thr Ser Asp Ile Ala
35 40 45
Val Arg Leu Leu His Thr His Tyr Asp His Val Ser Ala Leu His Pro
50 55 60
Val Ser Thr Pro Ser Lys Glu Tyr Thr Ser Ala Val Thr Glu Leu Val
65 70 75 80
Lys Asp Asp Val Lys Asn Val Glu Lys Ala Ile Ser Lys Glu Val Glu
85 90 95
Glu Glu Ser Lys Gln Gln Glu Arg Gly Ser His Leu Ile Gln Glu Glu
100 105 110
Glu Ile Lys Val Glu Glu Glu Gln Gly Asp Ile Glu Val Lys Met Ser
115 120 125
Ser Ala Glu Glu Glu Ser Glu Ala Ile Lys Cys Glu Arg Glu Met Lys
130 135 140
Val Leu Ser Glu Thr Val Ser Ala Ala Gln Leu Leu Leu Val Glu Asn
145 150 155 160
Ser Ser Glu Lys Pro Asp Phe Phe Glu Asp Asn Val Val Asp Leu Cys
165 170 175
Gln Phe Thr Thr Leu Gly Gly Val Tyr His Leu Asp Ile Leu Glu Leu
180 185 190
Pro Pro Gln Cys Lys Pro Val Lys Gly Trp Met Ile Val Glu Ile Leu
195 200 205
Lys Glu Gly Leu Gln Lys Tyr Thr Tyr Pro Pro Glu Thr Thr Glu Glu
210 215 220
Phe Glu Thr Glu Asn Ala Phe Pro Pro Ile Glu Val His Leu Arg Phe
225 230 235 240
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<210> 12440
<211> 2849
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (19)..(402)

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09/12/2005 09:45:50

<210> 12441
<211> 128
<212> PRT
<213> Homo sapiens

<400> 12441
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20 25 30
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35 40 45
Ala Lys Met Gly Glu Tyr Arg Lys Met Trp Asn Pro Arg Glu Pro Arg
50 55 60
Asp Trp Ala Gln Gln Tyr Arg Glu Arg Phe Ile Pro Phe Ser Lys Glu
65 70 75 80
Gln Leu Leu Arg Leu Leu Ile Gln Val Thr Gly Ile Pro Leu Glu Ser
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Gly Arg Glu Gly Gly Phe Gly Gly Val Leu Ser Pro Arg Gly Leu Leu
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115 120 125

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<211> 1577
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (472)..(1455)

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<212> PRT
<213> Homo sapiens

<400> 12443
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20 25 30
His Tyr Ser Asn Ile Ser Ala Ser Ala Asp Gln Ala Leu Asp Arg Phe
35 40 45
Ala Met Lys Arg Phe Tyr Glu Asp Lys Ile Val Pro Ile Gly Gln Pro
50 55 60
Ser Gln Arg Arg Tyr Val His Tyr Phe Ser Gly Leu Leu Ser Gly Ser
65 70 75 80
Ile Lys Met Asn Asn Lys Pro Leu Phe Leu His His Val Ile Met His
85 90 95
Gly Ile Pro Asn Phe Glu Ser Lys Gly Gly Cys Arg Pro Phe Leu Arg
100 105 110
Ile Tyr Gln Ala Met Gln Pro Val Tyr Thr Ser Gly Ile Tyr Asn Ile

0003-0205-0-0-0

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Pro Gly Asp Ser Gln Thr Ser Val Cys Ile Thr Ile Glu Pro Gly Leu
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Leu Leu Lys Gly Asp Ile Leu Leu Lys Cys Tyr His Lys Lys Phe Arg
145                 150                 155                 160
Ser Pro Ala Arg Asp Val Ile Phe Arg Val Gln Phe His Thr Cys Ala
                165                 170                 175
Ile His Asp Leu Gly Val Val Phe Gly Lys Glu Asp Leu Asp Asp Ala
            180                 185                 190
Phe Lys Asp Asp Arg Phe Pro Glu Tyr Gly Lys Val Glu Phe Val Phe
        195                 200                 205
Ser Tyr Gly Pro Glu Lys Ile Gln Gly Met Glu His Leu Glu Asn Gly
    210                 215                 220
Pro Ser Val Ser Val Asp Tyr Asn Thr Ser Asp Pro Leu Ile Arg Trp
225                 230                 235                 240
Asp Ser Tyr Asp Asn Phe Ser Gly His Arg Asp Asp Gly Met Glu Glu
                245                 250                 255
Val Val Gly His Thr Gln Gly Pro Leu Asp Gly Ser Leu Tyr Ala Lys
            260                 265                 270
Val Lys Lys Lys Asp Ser Leu His Gly Ser Thr Gly Ala Val Asn Ala
        275                 280                 285
Thr Arg Pro Thr Leu Ser Ala Thr Pro Asn Thr Trp Asn Thr Arg Phe
    290                 295                 300
Leu Cys Ile Tyr Ile Asp Gly Asn Ile Leu Tyr Ile Leu Tyr His Arg
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Ala Tyr Ser Arg Cys His Arg Val
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9501450 - 09/12/2008

<210> 12444
<211> 1757
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (159)..(1238)

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<210> 12445
<211> 360
<212> PRT
<213> Homo sapiens

<400> 12445
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35 40 45
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50 55 60
Ser Glu Ala Gly Thr Ser Leu Val Pro Ala Thr Ala Glu Pro Pro Ala
65 70 75 80
Glu Thr Pro Ala Glu Ile Val Asp Gly Gly Val Pro Gln Ala Gln Leu
85 90 95
Ala Gly Ser Asp Ser Asp Leu Asp Ser Asp Asp Glu Phe Val Pro His
100 105 110
Asp Met Ser Gly Asp Arg Glu Leu Lys Ser Ser Lys Ala Pro Ala Tyr
115 120 125
Val Arg Asp Cys Val Glu Ala Leu Asp Val Leu Thr Leu Ala Ala Gln
130 135 140
Glu Leu Ser Arg Pro Gly Cys Leu Gly Arg Thr Pro Gln Pro Gly Ser

WO 2004/050683 PCT/US2003/038800

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            180                 185                 190
Arg Ser Lys Thr Gln Arg Leu Ser Lys Gly Gly Pro Arg Gln Gly Pro
        195                 200                 205
Ala Gly Ser Pro Ser Arg Phe Asn Ser Val Ala Gly His Phe Phe Phe
    210                 215                 220
Pro Leu Leu Gln Arg Phe Asp Arg Pro Leu Val Thr Phe Asp Leu Leu
225                 230                 235                 240
Gly Glu Asp Gln Leu Val Leu Gly Arg Leu Ala His Thr Leu Gly Ala
                245                 250                 255
Leu Met Cys Leu Ala Val Asn Thr Thr Val Ala Val Ala Met Gly Lys
            260                 265                 270
Ala Leu Leu Glu Phe Val Trp Ala Leu Arg Phe His Ile Asp Ala Tyr
        275                 280                 285
Val Arg Gln Gly Leu Leu Ser Ala Val Ser Ser Val Leu Leu Ser Leu
    290                 295                 300
Pro Ala Ala Arg Leu Leu Glu Asp Leu Met Asp Glu Leu Leu Glu Ala
305                 310                 315                 320
Arg Ser Trp Leu Ala Asp Val Ala Glu Lys Asp Pro Asp Glu Asp Cys
                325                 330                 335
Arg Thr Leu Ala Leu Arg Ala Leu Leu Leu Leu Gln Arg Leu Lys Asn
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09350-0202800

<210> 12446
<211> 1617
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (431)..(1027)

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gtttacgttt gcagcctgaa gcactttaat ttttttttt ttggtctgtt cctgtaactt 1560
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<210> 12447
<211> 199
<212> PRT
<213> Homo sapiens

<400> 12447

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			20					25					30						
Leu	Pro	Pro	Gly	Lys	Gln	Leu	Cys	Glu	Glu	Glu	Arg	Arg	Ala	Met	Gln				
		35					40					45							
Ala	Ala	Leu	Asp	Ser	Val	Val	Cys	His	Thr	Pro	Leu	Asn	Asn	Leu	Gly				
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Phe	Ser	Arg	Lys	Gly	Ser	Ala	Leu	Thr	Phe	Ser	Val	Ala	Phe	Gln	Ala				
65					70					75					80				
Leu	Arg	Thr	Gly	Leu	Phe	Glu	His	Met	Lys	Leu	Lys	Leu	Gln	Phe	Thr				
				85					90					95					
Ala	Ser	Val	Ser	His	Pro	Pro	Pro	Glu	Ala	Arg	Pro	Leu	Ser	Arg	Lys				
			100					105					110						
Ser	Ser	Pro	Ser	Ser	Pro	Ala	Val	Arg	Asp	Leu	Val	Glu	Arg	His	Gln				
		115					120					125							
Ala	Ser	Leu	Gly	Arg	Ser	Gln	Ser	Phe	Ser	His	Gln	Gln	Pro	Ser	Arg				
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Ser	His	Leu	Met	Arg	Ser	Gly	Ser	Val	Met	Glu	Arg	Arg	Ala	Ile	Thr				
145					150					155					160				
Pro	Pro	Val	Ala	Ser	Pro	Val	Gly	Arg	Pro	Leu	Tyr	Leu	Pro	Pro	Asp				
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Lys Ala Val Leu Ser Leu Asp Lys Ile Ala Lys Arg Glu Cys Lys Val
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Leu Val Val Glu Pro Val Lys
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<210> 12448
<211> 2844
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (55)..(1581)

<400> 12448
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<211> 509
<212> PRT
<213> Homo sapiens

<400> 12449

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         35                  40                  45
Leu Ser Cys Ile Ile Asn Arg Cys Lys Leu Asp Val Arg Thr Arg Gly
     50                  55                  60
Leu Thr Val Met Phe Glu Ile Met Lys Thr Tyr Gly His Thr Tyr Glu
 65                  70                  75                  80
Lys His Trp Trp Gln Asp Leu Phe Arg Ile Val Phe Arg Ile Phe Asp
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Asn Met Lys Leu Pro Glu Gln Gln Thr Glu Lys Ala Glu Trp Met Thr
            100                 105                 110
Thr Thr Cys Asn His Ala Leu Tyr Ala Ile Cys Asp Val Phe Thr Gln
        115                 120                 125
Tyr Leu Glu Val Leu Ser Asp Val Leu Leu Asp Asp Ile Phe Ala Gln
    130                 135                 140
Leu Tyr Trp Cys Val Gln Gln Asp Asn Glu Gln Leu Ala Arg Ser Gly
145                 150                 155                 160
Thr Asn Cys Leu Glu Asn Val Val Ile Leu Asn Gly Glu Lys Phe Thr
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Leu Glu Ile Trp Asp Lys Thr Cys Asn Cys Thr Leu Asp Ile Phe Lys
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Val Asp Asn Arg Pro Gln Ala Pro Leu Ala Ser Ala Ser Ala Val Asn
                245                 250                 255
Glu Glu Val Ser Lys Ile Lys Ser Thr Ala Lys Phe Pro Glu Gln Lys
            260                 265                 270
Leu Phe Ala Ala Leu Leu Ile Lys Cys Val Val Gln Leu Glu Leu Ile
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Gln Thr Ile Asp Asn Ile Val Phe Phe Pro Ala Thr Ser Lys Lys Glu
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Asp Ala Glu Asn Leu Ala Ala Ala Gln Arg Asp Ala Val Asp Phe Asp
305                 310                 315                 320
Val Arg Val Asp Thr Gln Asp Gln Gly Met Tyr Arg Phe Leu Thr Ser
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Gln Gln Leu Phe Lys Leu Leu Asp Cys Leu Leu Glu Ser His Arg Phe
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Ala Lys Ala Phe Asn Ser Asn Asn Glu Gln Arg Thr Ala Leu Trp Lys
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Ala Gly Phe Lys Gly Lys Ser Lys Pro Asn Leu Leu Lys Gln Glu Thr
    370                 375                 380
Ser Ser Leu Ala Cys Gly Leu Arg Ile Leu Phe Arg Met Tyr Met Asp
385                 390                 395                 400
Glu Ser Arg Val Ser Ala Trp Glu Glu Val Gln Gln Arg Leu Leu Asn
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Val Cys Ser Glu Ala Leu Ser Tyr Phe Leu Thr Leu Thr Ser Glu Ser
            420                 425                 430
His Arg Glu Ala Trp Thr Asn Leu Leu Leu Leu Phe Leu Thr Lys Val
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Leu Lys Ile Ser Asp Asn Arg Phe Lys Ala His Ala Ser Phe Tyr Tyr
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Pro Leu Leu Cys Glu Ile Met Gln Phe Asp Leu Ile Pro Glu Leu Arg
465                 470                 475                 480
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<212> DNA
<213> Homo sapiens

<220>

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<221> CDS
<222> (1461)..(1964)

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<210> 12451
<211> 168
<212> PRT
<213> Homo sapiens

<400> 12451
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Glu Val Ser Gly Ala Arg Phe Trp Gly Phe Phe Arg Asn Leu Cys Gly
35 40 45
Gln Pro Glu Val Phe Phe His His Cys Phe Val His Asn Leu Cys Pro
50 55 60
Leu Leu Phe Leu Ala Pro Ser Gly Arg Asn Leu Thr Pro Ala Glu Leu
65 70 75 80
Pro Ala Lys Gln Arg Glu Gln Leu Leu Gly Ile Cys Asp Ala Ala Leu
85 90 95
Cys Arg Gln Val Gln Leu Leu Gly Val Arg Leu Val Val Gly Val Gly
100 105 110
Arg Leu Ala Glu Gln Arg Ala Arg Arg Ala Leu Ala Gly Leu Met Pro
115 120 125
Glu Val Gln Val Glu Gly Leu Leu His Pro Ser Pro Arg Asn Pro Gln
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145 150 155 160
Gly Leu Leu Pro Leu Leu Leu Lys
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<210> 12452
<211> 1755
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (232)..(654)

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<212> PRT
<213> Homo sapiens

<400> 12453

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			20					25				30			
Arg	Glu	Ile	Asp	Asn	Phe	Tyr	Pro	Glu	Arg	Phe	Thr	Tyr	His	Asn	Val
		35					40					45			
Arg	Leu	Trp	Asp	Glu	Glu	Ser	Ala	Gln	Leu	Leu	Pro	His	Trp	Lys	Glu
	50					55					60				
Thr	His	Arg	Phe	Ile	Glu	Ala	Ala	Arg	Ala	Gln	Gly	Thr	His	Val	Leu
65					70					75					80
Val	His	Cys	Lys	Met	Gly	Val	Ser	Arg	Ser	Ala	Ala	Thr	Val	Leu	Ala
				85					90					95	
Tyr	Ala	Met	Lys	Gln	Tyr	Glu	Cys	Ser	Leu	Glu	Gln	Ala	Leu	Arg	His
			100					105					110		
Val	Gln	Glu	Leu	Arg	Pro	Ile	Ala	Arg	Pro	Asn	Pro	Gly	Phe	Leu	Arg
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<210> 12454
<211> 1918
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (155)..(1528)

<400> 12454
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<210> 12455
<211> 458
<212> PRT
<213> Homo sapiens

<400> 12455

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        35                  40                  45
Phe Ile Gln Asp Val Lys Asn Ser Arg Ser Thr Asp Ser Ile Arg Leu
    50                  55                  60
Leu Ala Leu Leu Ser Leu Gly Glu Val Gly His His Ile Asp Leu Ser
65                  70                  75                  80
Gly Gln Leu Glu Leu Lys Ser Val Ile Leu Glu Ala Phe Ser Ser Pro
                85                  90                  95
Ser Glu Glu Val Lys Ser Ala Ala Ser Tyr Ala Leu Gly Ser Ile Ser
            100                 105                 110
Val Gly Asn Leu Pro Glu Tyr Leu Pro Phe Val Leu Gln Glu Ile Thr
        115                 120                 125
Ser Gln Pro Lys Arg Gln Tyr Leu Leu Leu His Ser Leu Lys Glu Ile
    130                 135                 140
Ile Ser Ser Ala Ser Val Val Gly Leu Lys Pro Tyr Val Glu Asn Ile
145                 150                 155                 160
Trp Ala Leu Leu Leu Lys His Cys Glu Cys Ala Glu Glu Gly Thr Arg
                165                 170                 175
Asn Val Val Ala Glu Cys Leu Gly Lys Leu Thr Leu Ile Asp Pro Glu
            180                 185                 190
Thr Leu Leu Pro Arg Leu Lys Gly Tyr Leu Ile Ser Gly Ser Ser Tyr
        195                 200                 205
Ala Arg Ser Ser Val Val Thr Ala Val Lys Phe Thr Ile Ser Asp His
    210                 215                 220
Pro Gln Pro Ile Asp Pro Leu Leu Lys Asn Cys Ile Gly Asp Phe Leu
225                 230                 235                 240
Lys Thr Leu Glu Asp Pro Asp Leu Asn Val Arg Arg Val Ala Leu Val
                245                 250                 255
Thr Phe Asn Ser Ala Ala His Asn Lys Pro Ser Leu Ile Arg Asp Leu
            260                 265                 270
Leu Asp Thr Val Leu Pro His Leu Tyr Asn Glu Thr Lys Val Arg Lys
        275                 280                 285
Glu Leu Ile Arg Glu Val Glu Met Gly Pro Phe Lys His Thr Val Asp
    290                 295                 300
Asp Gly Leu Asp Ile Arg Lys Ala Ala Phe Glu Cys Met Tyr Thr Leu
305                 310                 315                 320
Leu Asp Ser Cys Leu Asp Arg Leu Asp Ile Phe Glu Phe Leu Asn His
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Val Glu Asp Gly Leu Lys Asp His Tyr Asp Ile Lys Met Leu Thr Phe
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        355                 360                 365
Arg Leu Asp Arg Leu Val Glu Pro Leu Arg Ala Thr Cys Thr Thr Lys
    370                 375                 380
Val Lys Ala Asn Ser Val Lys Gln Glu Phe Glu Lys Gln Asp Glu Leu
385                 390                 395                 400
Lys Arg Ser Ala Met Arg Ala Val Ala Ala Leu Leu Thr Ile Pro Glu
                405                 410                 415
Ala Glu Lys Ser Pro Leu Met Ser Glu Phe Gln Ser Gln Ile Ser Ser
            420                 425                 430
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Ser Thr Asn Leu Glu Ser Met Asp Thr Ser
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<210> 12456
<211> 2081
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (9)..(719)

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<211> 237
<212> PRT
<213> Homo sapiens

<400> 12457

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Ser	Pro	Ala	Ala	Glu	Ser	Ser	Ser	Thr	Phe	Ser	Phe	Ser	Gly	Arg	Asp
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65					70					75					80
Ser	Leu	Gln	Gln	Ala	Ala	Ser	Arg	Ser	Pro	Ser	Phe	Gly	Asp	Pro	Gln
				85					90					95	
Leu	Ser	Pro	Glu	Ala	Arg	Pro	Arg	Cys	Thr	Ser	His	Ser	Glu	Thr	Pro
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Thr	Val	Asp	Asp	Glu	Glu	Lys	Val	Asp	Glu	Arg	Ala	Lys	Leu	Ser	Val
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Leu	Arg	Arg	Leu	Gln	Asp	Arg	Ser	Leu	Thr	Gln	Pro	Ile	Thr	Thr	Glu
				165					170					175	
Glu	Val	Val	Ile	Ala	Ala	Thr	Leu	Gln	Ala	Ser	Ala	His	Gln	Lys	Ala
			180					185					190		
Leu	Ala	Lys	Asp	Gln	Thr	Asn	Glu	Gly	Lys	Glu	Leu	Ala	Glu	Gln	Gly

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        195                 200                 205
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<210> 12458
<211> 2056
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (87)..(1298)

<400> 12458

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caagaaaatc tcatttatct ttatatactc tttgcacctc ctttttttag tcgagatata 1860
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0960450-0960800

aatatttgag gggagagaaa tatctacagg tatatatgga aacaaataat gtggtctgct 1920
ttataagatg gccagatcta cattaggaaa agtataagcc ccctccctaa tggccgctgg 1980
ggggtgaggg cggtgtgttg tatgtctttg ggtgtttgtt tttttataaa gcatataata 2040
aaataatcgt gctact 2056

<210> 12459
<211> 404
<212> PRT
<213> Homo sapiens

<400> 12459
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Lys Leu Arg Ser Val Ser Val Asp Leu Asn Val Asp Pro Ser Leu Gln
20 25 30
Ile Asp Ile Pro Asp Ala Leu Ser Glu Arg Asp Lys Val Lys Phe Thr
35 40 45
Val His Thr Lys Thr Thr Leu Pro Thr Phe Gln Ser Pro Glu Phe Ser
50 55 60
Val Thr Arg Gln His Glu Asp Phe Val Trp Leu His Asp Thr Leu Ile
65 70 75 80
Glu Thr Thr Asp Tyr Ala Gly Leu Ile Ile Pro Pro Ala Pro Thr Lys
85 90 95
Pro Asp Phe Asp Gly Pro Arg Glu Lys Met Gln Lys Leu Gly Glu Gly
100 105 110
Glu Gly Ser Met Thr Lys Glu Glu Phe Ala Lys Met Lys Gln Glu Leu
115 120 125
Glu Ala Glu Tyr Leu Ala Val Phe Lys Lys Thr Val Ser Ser His Glu
130 135 140
Val Phe Leu Gln Arg Leu Ser Ser His Pro Val Leu Ser Lys Asp Arg
145 150 155 160
Asn Phe His Val Phe Leu Glu Tyr Asp Gln Asp Leu Ser Val Arg Arg
165 170 175
Lys Asn Thr Lys Glu Met Phe Gly Gly Phe Phe Lys Ser Val Val Lys
180 185 190
Ser Ala Asp Glu Val Leu Phe Thr Gly Val Lys Glu Val Asp Asp Phe
195 200 205
Phe Glu Gln Glu Lys Asn Phe Leu Ile Asn Tyr Tyr Asn Arg Ile Lys
210 215 220
Asp Ser Cys Val Lys Ala Asp Lys Met Thr Arg Ser His Lys Asn Val
225 230 235 240
Ala Asp Asp Tyr Ile His Thr Ala Ala Cys Leu His Ser Leu Ala Leu
245 250 255
Glu Glu Pro Thr Val Ile Lys Lys Tyr Leu Leu Lys Val Ala Glu Leu
260 265 270
Phe Glu Lys Leu Arg Lys Val Glu Gly Arg Val Ser Ser Asp Glu Asp
275 280 285

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Leu Lys Leu Thr Glu Leu Leu Arg Tyr Tyr Met Leu Asn Ile Glu Ala
    290                 295                 300
Ala Lys Asp Leu Leu Tyr Arg Arg Thr Lys Ala Leu Ile Asp Tyr Glu
305                 310                 315                 320
Asn Ser Asn Lys Ala Leu Asp Lys Ala Arg Leu Lys Ser Lys Asp Val
                325                 330                 335
Lys Leu Ala Glu Ala His Gln Gln Glu Cys Cys Gln Lys Phe Glu Gln
            340                 345                 350
Leu Ser Glu Ser Ala Lys Glu Glu Leu Ile Asn Phe Lys Arg Lys Arg
        355                 360                 365
Val Ala Ala Phe Arg Lys Asn Leu Ile Glu Met Ser Glu Leu Glu Ile
    370                 375                 380
Lys His Ala Arg Asn Asn Val Ser Leu Leu Gln Ser Cys Ile Asp Leu
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<210> 12460
<211> 1377
<212> DNA
<213> Homo sapiens

<400> 12460

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gggctgggac cagactttgt tctcttcctc acctgaaatt atgcttccta aaatctcaag 360
ccaaactcaa agaatggggt ggtgggggcc accctgtgag gtggcccctg agaggtgggg 420
gcctctccag ggcacatctg gagttcttct ccagcttacc ctagggtgac caagtagggc 480
ctgtcacacc agggtggcgc agctttctgt gtgatgcaga tgtgtcctgg tttcggcagc 540
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gcagatgtcc cattgctccc tggagcctgt catgcctgtt ggggatcagg cagcctcctg 720
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ttgcctgttt tctgtttcaa acatgatagt tgatatgaga caatgccccc tatcctcagc 1020
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09/02/2004 09:56:03

<210> 12461
<211> 1776
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (41)..(418)

<400> 12461
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gcattgcggg tctcacgggg aggagacgag agtgcccctg gttgagtcag gaaagaattc 180
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gcacctggac tccttcccat ccttggccga ggtctgcgtg gcccttcagg gccgaatctg 420
acactgtctt cctcctgagt ctgccccccg ggcttcctgc ccacccccag gctgtttcat 480
ggcctctgca gggagcttcg tagaggtgag gctggtgcca tctgtctgct tcagaccacc 540
tcaggctctg cgtgccctca cagtcccctc tgcacttctc tgtggggcag ggaagccctt 600
cccatcaggt ctgctccagc ctggctacct tgttcctgct gtcccctccc cttcaggccc 660
ccggacaaga cttcagtgta cttgctggtg ccgggcagaa tgggggacct tgcctctcac 720
acacacctgc tagtatctcc gcaacctcca ggcatcatct cagctgacag tgacgccatc 780
ctggggaagc tcccctgact cctggctctc ctggaagcct gtggtgctcc ttcacaatgg 840
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tgtttgcctg ctgcgggact gtgagcagct tcagggccaa gacagtgcct ttccatccgt 960
gaatctcctg atccatcaga atactcgaaa gagaaatacc gactgagtgt attcattaaa 1020
gaattaatgt tccttacagg atcattgttg ttgaactgac ctgacatgtg tatagtaatc 1080
tcatgaacaa gaaagaatgt gttcacacgt ttgcttaaat tgaatttagc aatcgcatta 1140
ggatactgat atttccacaa tgtatataca ctatcctttt aaatttaact tatttgcttt 1200
ttagacggaa gctcctcagt cttagagagt tctgaaggtg gatttctcag ccacgttcaa 1260
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aaaaaaagct cagggcggtc gagtgcagtg gctcgcgcct gtaatcccag cactttggga 1500
ggccaaggtg ggcagatcac gaggtgagga gttcgagacc aacctggtaa acatagggaa 1560
accctatctc ttctaaaaaa aaaaaaatac aaaaaattag ttgggcgtgg tggatggcac 1620
ctgtagtctt agctactcag gaggctgagg caggagaatc gtttgaacct gggaggtgga 1680
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<210> 12462
<211> 126
<212> PRT
<213> Homo sapiens

0500450-050800

0050250.3-0050250

<400> 12462
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Gln Phe Cys Pro Cys Ser Cys Gly Cys Phe Leu His Cys Gly Ser His
20 25 30
Gly Glu Glu Thr Arg Val Pro Leu Val Glu Ser Gly Lys Asn Ser Ile
35 40 45
Phe Thr Ser Leu Pro Ala Asn Asp His Ser Ser Phe Thr Thr Ser Ala
50 55 60
Gly Thr Tyr Leu Gly Lys Glu Thr Gly Pro Met Trp Trp Pro Ser Leu
65 70 75 80
Arg Cys Gly Arg Ala Ser Gly Val Ala Leu Met His Ser Thr Ala Gln
85 90 95
Ala Cys Gly His His Ser Pro Trp Ala Ala Trp His Leu Asp Ser Phe
100 105 110
Pro Ser Leu Ala Glu Val Cys Val Ala Leu Gln Gly Arg Ile
115 120 125

<210> 12463
<211> 1270
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (17)..(532)

<400> 12463
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caaacgtctc ttccaactta tcaaaattat taagattatg caagaagaag ataaagcagt 120
cagtatccca gagcgtcatc ttcagacaag cagcctgcgc atcaaatctc aggaattaag 180
atctggccct cgcagacagc tgaattttga ttctcctgct gacaataaag acagaaatgc 240
cagcaatgat gggtttgaaa tgtgcagttt atcagatttc tctgcaaatg aacagaagtc 300
cacttaccta aaagtgctag aacacatgct accagatgat tcccagtacc atacaaaaac 360
aggaattctg aatgccacag ctggtgattc ctatgtgcaa acagaaatca gcacttcact 420
cttttcacca aattaccttt ctgcaatact gggggattgt gatattccca ttattcaaag 480
aatctctcat gtttcagggt ataactatgg aatcccccat tcttgtatca ggtaataaat 540
tttatctttc tttcttttga gggaaagtag cctcaggcaa gggcaggcct ctccttcatg 600
tccagcagac agcatctact ccttatttat agtaaatgaa tataacagaa attatcatga 660
acagcatttg catcaataat aggaatacct ggatgtggga aaattaatga gaaattggga 720
ctttctaggt gggagaaaga tgatattgtt catgtacatc agaacagctg ctacttgcca 780
ggatctgtag cagatctgtt tctattgttt attatagcgt aacatgatac atctagtaca 840
tctgtgaaag tgaaatagtt aacccttcta cagtggagaa aaaaattaca caatccacag 900
gacttttta aggttatcaa attcacttaa cccaaccagg agacttaaag atgctttgtt 960
aaaaaacaag ggcatgtagt ttaattaagt aggtctttgg ggcagttagt tcacctacac 1020
acattgaaat atgatcctaa ttttgagtgc tttctacaat ttcaaccccg gaaaaaacag 1080
ataattttgg tgattacaaa cagtaagaca ttgttggtgg agatgagagt ttgagagtca 1140

gggtgacaat aagttatttt tacctagtgt ttcgagttag aatttgaaat aaggtcccta 1200
agaggtgaaa taacaagtaa tccctagtac taacaatggt ataataggaa atatgttctt 1260
ttaatcttgt 1270

<210> 12464
<211> 172
<212> PRT
<213> Homo sapiens

<400> 12464
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Arg Leu Phe Gln Leu Ile Lys Ile Ile Lys Ile Met Gln Glu Glu Asp
20 25 30
Lys Ala Val Ser Ile Pro Glu Arg His Leu Gln Thr Ser Ser Leu Arg
35 40 45
Ile Lys Ser Gln Glu Leu Arg Ser Gly Pro Arg Arg Gln Leu Asn Phe
50 55 60
Asp Ser Pro Ala Asp Asn Lys Asp Arg Asn Ala Ser Asn Asp Gly Phe
65 70 75 80
Glu Met Cys Ser Leu Ser Asp Phe Ser Ala Asn Glu Gln Lys Ser Thr
85 90 95
Tyr Leu Lys Val Leu Glu His Met Leu Pro Asp Asp Ser Gln Tyr His
100 105 110
Thr Lys Thr Gly Ile Leu Asn Ala Thr Ala Gly Asp Ser Tyr Val Gln
115 120 125
Thr Glu Ile Ser Thr Ser Leu Phe Ser Pro Asn Tyr Leu Ser Ala Ile
130 135 140
Leu Gly Asp Cys Asp Ile Pro Ile Ile Gln Arg Ile Ser His Val Ser
145 150 155 160
Gly Tyr Asn Tyr Gly Ile Pro His Ser Cys Ile Arg
165 170

<210> 12465
<211> 2110
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1530)..(1892)

<400> 12465
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ttagttcgtt ttcatgctgc tgataaagac atacctgaga ctggacaatt tacaaaagaa 180

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aaggaggggc aagtcacatc ttatgtggat ggcaacaggc aaagagagag cttgtgcagg 300
gaaactcctg tttttaaaac caccagatct catgacaccc attcactgtc aggagaacag 360
catgggaaag acccaccccc atgattcaat tgtctcccac aaggccctc ccataccaca 420
tgggaattat gggagctaca agatgagatt tgggtgagga cacagagcca aaccacatca 480
gcaacatgtc agaacacaga aaaaatgtaa aatatcactg tatttctatg tactagtagt 540
gaactgtctc ctagcttgtt tgtttaaaaa aaaaaatccc atggtcttca atttggtcat 600
ttaaaaataa tctacaaggt atactgtttt tctgttcttg ttatttccta acttttaagg 660
tttctatttt tccaccctgt agatcttgtt ctcactagag aataatttct acattatgcc 720
caggttcttc tgagctatga aggggcccag atttaagggc tatttttgac accctaaatg 780
tgctgagaca agtcattaag gtggtcctgc caggacacag ccatctaaag cagcaatctg 840
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tgaggtaggg tagaaggggc agtacaccaa taggcctggg tatcctagaa caataggcct 960
agaacttctc atcagctcct gtttcttttc atctctagga aaggagaaag agactaccta 1020
ctgcatttct gtcactcgct gaaaaggaca ctctgtcaga aaatcttcta gcaaacttca 1080
aagggcaaaa tcacccccttg ttactgataa agcccagaga gcttcagcag ctaacattcc 1140
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ttccttaact cagtgtgcta tctccccacg actaggtcac tactgcttta taatcacctt 1260
tgtagccacc agtggatttt gctcatcagt atttttcagg caattgatac tttagatatt 1320
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agtcaaggag tcaggcagag gcccttgcca tggggctttt taggataaag caacaagcct 1560
ggactttgct ctacaacagg gttttgcata gggagtggta tgaccagatc cctcaagaaa 1620
gaaagcttag agaccatcct gagcaacagg gcaaaacctt gtctctacta aaaatacaaa 1680
aaattagctg ggcatggtgg cctgtaccta taatcccagc tacttgggag gctgagacac 1740
aacaatcact tgaacctggg atgcagaggt tgcagggagc tgagattgaa ccactgtact 1800
ccagcctggg gaacaaactg agactctgtc tcaaaaaaaa agaaagaata cttatgggta 1860
aatctgacaa aataagtgta agacctgtac actaaaaact acaaaacatt gctgaaataa 1920
attaaagaag acctaaataa tcggagagat atactttgtt taaaggtcag aagtctcagt 1980
attgctaaaa tgagaactct tcccaatgca gtgctaatca aatttctagc aggctttttg 2040
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atataacttt 2110

<210> 12466
<211> 121
<212> PRT
<213> Homo sapiens

<400> 12466
Met Gly Leu Phe Arg Ile Lys Gln Gln Ala Trp Thr Leu Leu Tyr Asn
1 5 10 15
Arg Val Leu His Arg Glu Trp Tyr Asp Gln Ile Pro Gln Glu Arg Lys
20 25 30
Leu Arg Asp His Pro Glu Gln Gln Gly Lys Thr Leu Ser Leu Leu Lys
35 40 45
Ile Gln Lys Ile Ser Trp Ala Trp Trp Pro Val Pro Ile Ile Pro Ala

09652460.092800

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Thr Trp Glu Ala Glu Thr Gln Gln Ser Leu Glu Pro Gly Met Gln Arg
 65                  70                  75                  80
Leu Gln Gly Ala Glu Ile Glu Pro Leu Tyr Ser Ser Leu Gly Asn Lys
                85                  90                  95
Leu Arg Leu Cys Leu Lys Lys Lys Glu Arg Ile Leu Met Gly Lys Ser
            100                 105                 110
Asp Lys Ile Ser Val Arg Pro Val His
        115                 120
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<210> 12467
<211> 2106
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (223)..(1716)

<400> 12467

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ggagccagac ttcggaacgg gtgtcctgct actcctgctg gggctcctcc aggacaaggg 180
cacacaactg gttccgttaa gcccctctct cgctcagacg ccatggagct ggatctgtct 240
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actccccggc cccctgatac ccctctgcct gaggaggtaa agaggtccca gcctctcctc 360
atcccaattc tcgggggccc ctccagtgca agggggctgc tcccccgcga tgccagccgc 420
ccccatgtag taaaggtgta cagtgaggat ggggcctgca ggtctgtgga ggtggcagca 480
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gagacctggg ggctggtggg gtgccacccc cacctagcac tggagcgggg tttggaggac 600
cacgagtccg tggtggaagt gcaggctgcc tggcccgtgg gcggagatag ccgcttcgtc 660
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cagaacttcc tgaatgctgg cagctttcct gagatccagg gctttctgca gctgcggggt 840
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gaagatgagc agagccgcac ctgctggctg gctgccttcc gcctcttcaa gtacggggtg 1140
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ctcagtgcag ccatccaccg cacccaactc tggttccacg ggcgcatttc ccgtgaggag 1440
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cagcggaacc cccagggctt tgtcctctct ttgtgccacc tgcagaaagt gaagcattat 1560
ctcatcctgc cgagcgagga ggagggccgc ctgtacttca gcatggatga tggccagacc 1620
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09525460.020200

cgcttcactg acctgctgca gctcgtggag ttccaccagc tgaaccgcgg catcctgccg 1680
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cggccacagg ggacgggatg aggagcggga gggttccgcc actccagttt tctcctctgc 1860
ttctttgcct ccctcagata gaaaacagcc cccactccag tccactcctg acccctctcc 1920
tcaagggaag gccttgggtg gccccctctc cttctcctag ctctggaggt gctgctctag 1980
ggcagggaat tatgggagaa gtgggggcag cccaggcggt ttcacgcccc acactttgta 2040
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tgatac 2106

<210> 12468
<211> 498
<212> PRT
<213> Homo sapiens

<400> 12468
Met Glu Leu Asp Leu Ser Pro Pro His Leu Ser Ser Ser Pro Glu Asp
1 5 10 15
Leu Cys Pro Ala Pro Gly Thr Pro Pro Gly Thr Pro Arg Pro Pro Asp
20 25 30
Thr Pro Leu Pro Glu Glu Val Lys Arg Ser Gln Pro Leu Leu Ile Pro
35 40 45
Ile Leu Gly Gly Pro Ser Ser Ala Arg Gly Leu Leu Pro Arg Asp Ala
50 55 60
Ser Arg Pro His Val Val Lys Val Tyr Ser Glu Asp Gly Ala Cys Arg
65 70 75 80
Ser Val Glu Val Ala Ala Gly Ala Thr Ala Arg His Val Cys Glu Met
85 90 95
Leu Val Gln Arg Ala His Ala Leu Ser Asp Glu Thr Trp Gly Leu Val
100 105 110
Gly Cys His Pro His Leu Ala Leu Glu Arg Gly Leu Glu Asp His Glu
115 120 125
Ser Val Val Glu Val Gln Ala Ala Trp Pro Val Gly Gly Asp Ser Arg
130 135 140
Phe Val Phe Arg Lys Asn Phe Ala Lys Tyr Glu Leu Phe Lys Ser Ser
145 150 155 160
Pro His Ser Leu Phe Pro Glu Lys Met Val Ser Ser Cys Leu Asp Ala
165 170 175
His Thr Gly Ile Ser His Glu Asp Leu Ile Gln Asn Phe Leu Asn Ala
180 185 190
Gly Ser Phe Pro Glu Ile Gln Gly Phe Leu Gln Leu Arg Gly Ser Gly
195 200 205
Arg Lys Leu Trp Lys Arg Phe Phe Cys Phe Leu Arg Arg Ser Gly Leu
210 215 220
Tyr Tyr Ser Thr Lys Gly Thr Ser Lys Asp Pro Arg His Leu Gln Tyr
225 230 235 240
Val Ala Asp Val Asn Glu Ser Asn Val Tyr Val Val Thr Gln Gly Arg

0050290-0050498

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                245                 250                 255
Lys Leu Tyr Gly Met Pro Thr Asp Phe Gly Phe Cys Val Lys Pro Asn
            260                 265                 270
Lys Leu Arg Asn Gly His Lys Gly Leu Arg Ile Phe Cys Ser Glu Asp
        275                 280                 285
Glu Gln Ser Arg Thr Cys Trp Leu Ala Ala Phe Arg Leu Phe Lys Tyr
    290                 295                 300
Gly Val Gln Leu Tyr Lys Asn Tyr Gln Gln Ala Gln Ser Arg His Leu
305                 310                 315                 320
His Pro Ser Cys Leu Gly Ser Pro Pro Leu Arg Ser Ala Ser Asp Asn
                325                 330                 335
Thr Leu Val Ala Met Asp Phe Ser Gly His Ala Gly Arg Val Ile Glu
            340                 345                 350
Asn Pro Arg Glu Ala Leu Ser Val Ala Leu Glu Glu Ala Gln Ala Trp
        355                 360                 365
Arg Lys Lys Thr Asn His Arg Leu Ser Leu Pro Met Pro Ala Ser Gly
    370                 375                 380
Thr Ser Leu Ser Ala Ala Ile His Arg Thr Gln Leu Trp Phe His Gly
385                 390                 395                 400
Arg Ile Ser Arg Glu Glu Ser Gln Arg Leu Ile Gly Gln Gln Gly Leu
                405                 410                 415
Val Asp Gly Leu Phe Leu Val Arg Glu Ser Gln Arg Asn Pro Gln Gly
            420                 425                 430
Phe Val Leu Ser Leu Cys His Leu Gln Lys Val Lys His Tyr Leu Ile
        435                 440                 445
Leu Pro Ser Glu Glu Glu Gly Arg Leu Tyr Phe Ser Met Asp Asp Gly
    450                 455                 460
Gln Thr Arg Phe Thr Asp Leu Leu Gln Leu Val Glu Phe His Gln Leu
465                 470                 475                 480
Asn Arg Gly Ile Leu Pro Cys Leu Leu Arg His Cys Cys Thr Arg Val
                485                 490                 495
Ala Leu
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<210> 12469
<211> 2093
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (251)..(934)

<400> 12469
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ctggatgaga cgtcagaccc tgcgctcctg gcccgctgct ccgacttctt catcgagcac 180

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agtcagtacg agagggcggt agagctgctg ctggctgtcc acgggggtcg cacacagcct 240
gcgcaccgac atgcacatca gtggagtgtt tgccaccaag gatgctgtcg cagtctggaa 300
cggaaggcag gtggcgatct tcgagctttc tggagccgcg atacggagtg cagggacctt 360
cttgtgtgag acgcctgtgt tagcaatgca tgaagaaaac gtttacacgg tggagtcaaa 420
ccgagttcaa gttcgaacct ggcaggggac tgtcaaacaa ctcctccttt tctcggagac 480
tgagggaat ccctgcttct tggacatctg tgggaatttc ctggttgtag ggacagactt 540
ggctcacttt aaaagctttg atctttcccg aagagaggcc aaagcacact gtagctgcag 600
gagcctggcg gagctggtcc ctggggtggg gggcatcgct tctctgcggt gcagcagcag 660
cgggagcacc atcagcatcc tccccagcaa ggctgacaac agccctgatt ccaaaatctg 720
cttctacgat gttgaaatgg acacagtgac cgtctttgac ttcaagactg gacaggcttg 780
gtgtcttgct cttgtggagg ttggaccaaa ggggccgagt gcaagggacg cctctgctga 840
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cagaagaagt gatgaaggtc aagctgagcg ggaaaaccgg ccgccgggca gacatcgctt 1260
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cggctcctga gcaacagctg ggacacccgg gccttggcgg ctgcaccccc tgctaggctc 2040
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<210> 12470
<211> 228
<212> PRT
<213> Homo sapiens

<400> 12470
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1 5 10 15
Asn Gly Arg Gln Val Ala Ile Phe Glu Leu Ser Gly Ala Ala Ile Arg
20 25 30
Ser Ala Gly Thr Phe Leu Cys Glu Thr Pro Val Leu Ala Met His Glu
35 40 45
Glu Asn Val Tyr Thr Val Glu Ser Asn Arg Val Gln Val Arg Thr Trp
50 55 60

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Gln Gly Thr Val Lys Gln Leu Leu Leu Phe Ser Glu Thr Glu Gly Asn
 65                  70                  75                  80
Pro Cys Phe Leu Asp Ile Cys Gly Asn Phe Leu Val Val Gly Thr Asp
                 85                  90                  95
Leu Ala His Phe Lys Ser Phe Asp Leu Ser Arg Arg Glu Ala Lys Ala
            100                 105                 110
His Cys Ser Cys Arg Ser Leu Ala Glu Leu Val Pro Gly Val Gly Gly
        115                 120                 125
Ile Ala Ser Leu Arg Cys Ser Ser Ser Gly Ser Thr Ile Ser Ile Leu
    130                 135                 140
Pro Ser Lys Ala Asp Asn Ser Pro Asp Ser Lys Ile Cys Phe Tyr Asp
145                 150                 155                 160
Val Glu Met Asp Thr Val Thr Val Phe Asp Phe Lys Thr Gly Gln Ala
                165                 170                 175
Trp Cys Leu Ala Leu Val Glu Val Gly Pro Lys Gly Pro Ser Ala Arg
            180                 185                 190
Asp Ala Ser Ala Glu Thr Arg Val Trp Glu Thr Pro His Ala Leu His
        195                 200                 205
Leu Pro Ala Pro Pro Ser Trp Arg Gly Pro Gly Ser Val Gly Lys Gly
    210                 215                 220
Ser Cys Glu Arg
225
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<210> 12471
<211> 1751
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (160)..(603)

<400> 12471
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caataggtgt ggagtttgga gctcgtatgg tcaacattga tggaaaacaa atcaaactgc 180
aaatctggga tacggggagc agctggagca ctgctggtgt acgacattac aaggcgtgaa 240
accttcaacc acctgacctc atggttagag gatgcccggc agcactctag ttccaacatg 300
gttatcatgc tcattgggaa taagagtgac ctagagtccc gcagggatgt gaagagagaa 360
gaaggagagg cctttgctag ggagcatgga cttatattca tggaaacttc agccaaaaca 420
gcctgcaatg ttgaagaggc cttcattaac acagccaaag aaatatatag gaagatccag 480
cagggtttat ttgatgtcca cttcccacta agaattaggg tcaaagacat tctatttgaa 540
cacttgcaat tacctagatc tagttggcct ttggttgata gatcctctgc ctcggaattt 600
cattgagttt ttttcttcct tgcctttggg tgtctgcttg ccacttccta agaattcttg 660
tagaaggcag tttcctctac ttgcccaaga gcactgagta cttctctact atcctattat 720
tagcttctat ctcttagtgt aacttcaaaa cttttaagag cagtgaagtt ggtcagggac 780
atgtggccac ttattattac ctaaagaaaa catttgttcc ctgttcattt tattttaggg 840

gccagatcta acattgtagt gtctttcacc agatagactt ctactgtttc atcaaactcc 900
cttcttaact agacctagac tttctactcc aatcaggcta atctacttac tgaatgtgac 960
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tattccttag ttttcatatg ttggttattc atatgtctat ttatatgtat atttatttta 1140
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cctctctctg taattctgcc ccactcattt gtttaccctg ggttttatac agttctcttc 1440
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ctgcctgcta gtaagcagtc acataagtgg gtacctatcc agccattctc ttttcagagc 1560
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gtatcaaagc t 1751

<210> 12472
<211> 148
<212> PRT
<213> Homo sapiens

<400> 12472
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20 25 30
Thr Ser Trp Leu Glu Asp Ala Arg Gln His Ser Ser Ser Asn Met Val
35 40 45
Ile Met Leu Ile Gly Asn Lys Ser Asp Leu Glu Ser Arg Arg Asp Val
50 55 60
Lys Arg Glu Glu Gly Glu Ala Phe Ala Arg Glu His Gly Leu Ile Phe
65 70 75 80
Met Glu Thr Ser Ala Lys Thr Ala Cys Asn Val Glu Glu Ala Phe Ile
85 90 95
Asn Thr Ala Lys Glu Ile Tyr Arg Lys Ile Gln Gln Gly Leu Phe Asp
100 105 110
Val His Phe Pro Leu Arg Ile Arg Val Lys Asp Ile Leu Phe Glu His
115 120 125
Leu Gln Leu Pro Arg Ser Ser Trp Pro Leu Val Asp Arg Ser Ser Ala
130 135 140
Ser Glu Phe His
145

<210> 12473
<211> 1772

<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (186)..(1079)

<400> 12473
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gtaaatgact ttctctccga aacgctaaat attctttccc gcaggagctc atatccttat 180
tttccatgac ggatcttaac gacaatatat gcaaaagata tataaagatg ataactaata 240
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caagcaccta ttatggtaac ttacgaccta tttctccgtg gcgttggctg ttttctgctg 360
ttgttcctgt tctgatcgtc tctaatggcc ttaaaaagaa aagtctagat cacagtgggg 420
ctctaggagg gctagtcgtt ggatttatcc taaccattgc aaatttcagc ttttttacct 480
ctttgctgat gtttttcttg tcttcttcga aactcactaa atggaaggga gaagtgaaga 540
agcgtctaga ttcagaatat aaggaaggtg ggcaaaggaa ttgggttcag gtgttctgta 600
atggagctgt acccacagaa ctggccctgc tgtacatgat agaaaatggc cccggggaaa 660
tcccagtcga tttttccaag cagtactccg cttcctggat gtgtttgtct ctcttggctg 720
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gttctccaag actgataaca acctgggaga aagttccagt tggtaccaat ggaggagtta 840
cagtggtggg ccttgtctcc agtctccttg gtggtacctt tgtgggcatt gcatacttcc 900
tcacacagct gatttttgtg aatgatttag acatttctgc cccgcagtgg ccaattattg 960
catttggtgg tttagctgga ttactaggat caattgtgga ctcatactta ggggctacaa 1020
tgcagtatac tggtaagaac attccttcat tcttgcaact tattggtatg ttaaagaaat 1080
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ttaaattaat tgaaagagaa ttagtcccgc gcagcaatga ttagaagcca tgtggggaag 1260
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gagaattgca tgaacctggg aggcggagat tgcagtgagc cgagatcatg ccactgcact 1740
atagcctggg caacagagca agactccatc tc 1772

<210> 12474
<211> 298
<212> PRT
<213> Homo sapiens

<400> 12474
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1 5 10 15

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Thr Asn Ile Val Ile Leu Ser Leu Ile Ile Cys Ile Ser Leu Ala Phe
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Trp Ile Ile Ser Met Thr Ala Ser Thr Tyr Tyr Gly Asn Leu Arg Pro
            35                  40                  45
Ile Ser Pro Trp Arg Trp Leu Phe Ser Ala Val Val Pro Val Leu Ile
        50                  55                  60
Val Ser Asn Gly Leu Lys Lys Lys Ser Leu Asp His Ser Gly Ala Leu
65                  70                  75                  80
Gly Gly Leu Val Val Gly Phe Ile Leu Thr Ile Ala Asn Phe Ser Phe
                85                  90                  95
Phe Thr Ser Leu Leu Met Phe Phe Leu Ser Ser Ser Lys Leu Thr Lys
            100                 105                 110
Trp Lys Gly Glu Val Lys Lys Arg Leu Asp Ser Glu Tyr Lys Glu Gly
        115                 120                 125
Gly Gln Arg Asn Trp Val Gln Val Phe Cys Asn Gly Ala Val Pro Thr
    130                 135                 140
Glu Leu Ala Leu Leu Tyr Met Ile Glu Asn Gly Pro Gly Glu Ile Pro
145                 150                 155                 160
Val Asp Phe Ser Lys Gln Tyr Ser Ala Ser Trp Met Cys Leu Ser Leu
                165                 170                 175
Leu Ala Ala Leu Ala Cys Ser Ala Gly Asp Thr Trp Ala Ser Glu Val
            180                 185                 190
Gly Pro Val Leu Ser Lys Ser Ser Pro Arg Leu Ile Thr Thr Trp Glu
        195                 200                 205
Lys Val Pro Val Gly Thr Asn Gly Gly Val Thr Val Val Gly Leu Val
    210                 215                 220
Ser Ser Leu Leu Gly Gly Thr Phe Val Gly Ile Ala Tyr Phe Leu Thr
225                 230                 235                 240
Gln Leu Ile Phe Val Asn Asp Leu Asp Ile Ser Ala Pro Gln Trp Pro
                245                 250                 255
Ile Ile Ala Phe Gly Gly Leu Ala Gly Leu Leu Gly Ser Ile Val Asp
            260                 265                 270
Ser Tyr Leu Gly Ala Thr Met Gln Tyr Thr Gly Lys Asn Ile Pro Ser
        275                 280                 285
Phe Leu Gln Leu Ile Gly Met Leu Lys Lys
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<210> 12475
<211> 1721
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (51)..(932)

<400> 12475

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attttacttt aagtaaagct taaacacttg gcatacaact g 1721

<210> 12476
<211> 294
<212> PRT
<213> Homo sapiens

<400> 12476
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1 5 10 15
Asn Ile His Asp Ile Ile Pro Asp Arg Ser Gly Pro Glu Leu Gly Gly
20 25 30
Asp Ala Thr Ile Arg Lys Met Leu Ser Phe Trp Trp Pro Leu Ala Leu
35 40 45
Ile Leu Ala Thr Gln Arg Ile Ser Arg Pro Ile Val Asn Leu Phe Val
50 55 60
Ser Arg Asp Leu Gly Gly Ser Ser Ala Ala Thr Glu Ala Val Ala Ile
65 70 75 80
Leu Thr Ala Thr Tyr Pro Val Gly His Met Pro Tyr Gly Trp Leu Thr

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                85                  90                  95
Glu Ile Arg Ala Val Tyr Pro Ala Phe Asp Lys Asn Asn Pro Ser Asn
            100                 105                 110
Lys Leu Val Ser Thr Ser Asn Thr Val Thr Ala Ala His Ile Lys Lys
        115                 120                 125
Phe Thr Phe Val Cys Met Ala Leu Ser Leu Thr Leu Cys Phe Val Met
    130                 135                 140
Phe Trp Thr Pro Asn Val Ser Glu Lys Ile Leu Ile Asp Ile Ile Gly
145                 150                 155                 160
Val Asp Phe Ala Phe Ala Glu Leu Cys Val Val Pro Leu Arg Ile Phe
                165                 170                 175
Ser Phe Phe Pro Val Pro Val Thr Val Arg Ala His Leu Thr Gly Trp
            180                 185                 190
Leu Met Thr Leu Lys Lys Thr Phe Val Leu Ala Pro Ser Ser Val Leu
        195                 200                 205
Arg Ile Ile Val Leu Ile Ala Ser Leu Val Val Leu Pro Tyr Leu Gly
    210                 215                 220
Val His Gly Ala Thr Leu Gly Val Gly Ser Leu Leu Ala Gly Phe Val
225                 230                 235                 240
Gly Glu Ser Thr Met Val Ala Ile Ala Ala Cys Tyr Val Tyr Arg Lys
                245                 250                 255
Gln Lys Lys Lys Met Glu Asn Glu Ser Ala Thr Glu Gly Glu Asp Ser
            260                 265                 270
Ala Met Thr Asp Met Pro Pro Thr Glu Glu Val Thr Asp Ile Val Glu
        275                 280                 285
Met Arg Glu Glu Asn Glu
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<210> 12477
<211> 1676
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (4)..(1257)

<400> 12477
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cacactaaag actgtcccaa gtgcaacatc tgcattgaga agaatggagg ctgcaatcac 960
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gaaaacctct catggaaagt ggagcgtgca gacagctatg acagagggga cttggagaac 1200
cagatgcata tagcggagca gcggaggaga accctgctga aagatttcca tgacacctaa 1260
gttgggatgt ggatgtgccg gggtgaggaa gatgtggctg caaggtctcc cggctgccat 1320
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tggttgttgg gagggaggga aagtgttttc tgaatggcta ttaatagtat tagatcatca 1560
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aggataacac agagcccttt ttgaaaataa attggcattg gagtgtttta ccctct 1676

<210> 12478
<211> 418
<212> PRT
<213> Homo sapiens

<400> 12478
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Asp Asp Glu Asp Asp Glu Asp Tyr Asp Pro Asn Cys Glu Glu Glu Glu
20 25 30
Glu Glu Glu Glu Asp Asp Pro Gly Asp Ile Glu Asp Tyr Tyr Val Gly
35 40 45
Val Ala Ser Asp Val Glu Gln Gln Gly Ala Asp Ala Phe Asp Pro Glu
50 55 60
Glu Tyr Gln Phe Thr Cys Leu Thr Tyr Lys Glu Ser Glu Gly Ala Leu
65 70 75 80
Asn Glu His Met Thr Ser Leu Ala Ser Val Leu Lys Val Ser His Ser
85 90 95
Val Ala Lys Leu Ile Leu Val Asn Phe His Trp Gln Val Ser Glu Ile
100 105 110
Leu Asp Arg Tyr Lys Ser Asn Ser Ala Gln Leu Leu Val Glu Ala Arg
115 120 125
Val Gln Pro Asn Pro Ser Lys His Val Pro Thr Ser His Pro Pro His
130 135 140
His Cys Ala Val Cys Met Gln Phe Val Arg Lys Glu Asn Leu Leu Ser
145 150 155 160
Leu Ala Cys Gln His Gln Phe Cys Arg Ser Cys Trp Glu Gln His Cys

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Ser Val Leu Val Lys Asp Gly Val Gly Val Gly Val Ser Cys Met Ala
            180                 185                 190
Gln Asp Cys Pro Leu Arg Thr Pro Glu Asp Phe Val Phe Pro Leu Leu
        195                 200                 205
Pro Asn Glu Glu Leu Arg Glu Lys Tyr Arg Arg Tyr Leu Phe Arg Asp
    210                 215                 220
Tyr Val Glu Ser His Tyr Gln Leu Gln Leu Cys Pro Gly Ala Asp Cys
225                 230                 235                 240
Pro Met Val Ile Arg Val Gln Glu Pro Arg Ala Arg Arg Val Gln Cys
                245                 250                 255
Asn Arg Cys Asn Glu Val Phe Cys Phe Lys Cys Arg Gln Met Tyr His
            260                 265                 270
Ala Pro Thr Asp Cys Ala Thr Ile Arg Lys Trp Leu Thr Lys Cys Ala
        275                 280                 285
Asp Asp Ser Glu Thr Ala Asn Tyr Ile Ser Ala His Thr Lys Asp Cys
    290                 295                 300
Pro Lys Cys Asn Ile Cys Ile Glu Lys Asn Gly Gly Cys Asn His Met
305                 310                 315                 320
Gln Cys Ser Lys Cys Lys His Asp Phe Cys Trp Met Cys Leu Gly Asp
                325                 330                 335
Trp Lys Thr His Gly Ser Glu Tyr Tyr Glu Cys Ser Arg Tyr Lys Glu
            340                 345                 350
Asn Pro Asp Ile Val Asn Gln Ser Gln Gln Ala Gln Ala Arg Glu Ala
        355                 360                 365
Leu Lys Lys Tyr Leu Phe Tyr Phe Glu Arg Trp Glu Asn Leu Ser Trp
    370                 375                 380
Lys Val Glu Arg Ala Asp Ser Tyr Asp Arg Gly Asp Leu Glu Asn Gln
385                 390                 395                 400
Met His Ile Ala Glu Gln Arg Arg Arg Thr Leu Leu Lys Asp Phe His
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Asp Thr
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<212> DNA
<213> Homo sapiens

<220>
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<222> (191)..(1078)

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gtgtgcatat tagagcacta atttgtttct ctctttcaaa gaactggatg aattgcctcc 180

09/02/2005 10:47:00

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ccttctgaga ctggattttg aaaaagacat taagcaaatg cttctgtttc ttaaagatgt 420
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tctggtagtt cgtctcccaa ggctgctaac tggaagtctg gaacccgtga aagaaaatat 720
gaaggtttat cgtcttgaac ttggttttaa acataacgaa attcaacata tgatcaccag 780
aatcccaaag atgttaactg caaataaaat gaaacttacc gagacgtttg attttgtgca 840
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<210> 12480
<211> 296
<212> PRT
<213> Homo sapiens

<400> 12480
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35 40 45
Glu Lys His Pro Glu Ala Ala Asn Leu Leu Leu Arg Leu Asp Phe Glu
50 55 60
Lys Asp Ile Lys Gln Met Leu Leu Phe Leu Lys Asp Val Gly Ile Glu
65 70 75 80
Asp Asn Gln Leu Gly Ala Phe Leu Thr Lys Asn His Ala Ile Phe Ser
85 90 95
Glu Asp Leu Glu Asn Leu Lys Thr Arg Val Ala Tyr Leu His Ser Lys
100 105 110
Asn Phe Ser Lys Ala Asp Val Ala Gln Met Val Arg Lys Ala Pro Phe
115 120 125
Leu Leu Asn Phe Ser Val Glu Arg Leu Asp Asn Arg Leu Gly Phe Phe
130 135 140
Gln Lys Glu Leu Glu Leu Ser Val Lys Lys Thr Arg Asp Leu Val Val
145 150 155 160
Arg Leu Pro Arg Leu Leu Thr Gly Ser Leu Glu Pro Val Lys Glu Asn
165 170 175
Met Lys Val Tyr Arg Leu Glu Leu Gly Phe Lys His Asn Glu Ile Gln

09/529,460

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            180                 185                 190
His Met Ile Thr Arg Ile Pro Lys Met Leu Thr Ala Asn Lys Met Lys
        195                 200                 205
Leu Thr Glu Thr Phe Asp Phe Val His Asn Val Met Ser Ile Pro His
    210                 215                 220
His Ile Ile Val Lys Phe Pro Gln Val Phe Asn Thr Arg Leu Phe Lys
225                 230                 235                 240
Val Lys Glu Arg His Leu Phe Leu Thr Tyr Leu Gly Arg Ala Gln Tyr
                245                 250                 255
Asp Pro Ala Lys Pro Asn Tyr Ile Ser Leu Asp Lys Leu Val Ser Ile
            260                 265                 270
Pro Asp Glu Ile Phe Cys Glu Glu Ile Ala Lys Ala Ser Val Gln Asp
        275                 280                 285
Phe Glu Lys Phe Leu Lys Thr Leu
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09/05/2005 09:50:00

<210> 12481
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<212> DNA
<213> Homo sapiens

<400> 12481

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tgtttggcta atcatgttat gttgttctga agttactgct gccctatacc cacttcacac 420
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agtcttagaa tgtcaaataa agtgtgataa gaaataagag gagggaagat attccaagta 720
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<210> 12482
<211> 1279
<212> DNA
<213> Homo sapiens

<400> 12482
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cctttgtttt tacccatttc taattttaca ttcctgtctg aacagctttc tgtcttgaac 240
atatggcaga atgatgttta taatctcttg aagttgtctc tggttacatc tctccgtgaa 300
ttatccattg tgtgttttat ttgcttttct ctgtcatgaa gcatatatta gaactaacgt 360
caaatcagag gctcataatg accttagaaa ccacttagtg aaacctctca ttttgcaatt 420
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<210> 12483
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<212> DNA
<213> Homo sapiens

0560-05450-US2

<220>
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<222> (269)..(643)

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<210> 12484
<211> 125
<212> PRT
<213> Homo sapiens

<400> 12484
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35 40 45
Pro Leu Asn Glu Thr Ala Glu Glu Glu Ser Arg Ile Ser Ser Ser Pro

0050205-0050205

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His Ser Glu Glu Glu Ser Glu Glu Gly Ser Gly Asp Leu Gly Glu Pro
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Leu Tyr Glu Glu Pro Cys Asn Glu Ile Ser Lys Glu Gln Ala Lys Ala
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<210> 12485
<211> 1624
<212> DNA
<213> Homo sapiens

<400> 12485

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<210> 12486

<211> 1825
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (73)..(675)

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<210> 12487
<211> 201
<212> PRT
<213> Homo sapiens

<400> 12487

Doc. No. 4050.0004000

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Phe Lys Asp Val Ser Glu Pro Ile Val Phe Leu Gln Gln Met Gln Glu
        35                  40                  45
Phe Arg Glu Lys Ile Lys Val Ile Lys Glu Thr Pro Leu Pro Pro Ser
    50                  55                  60
Asn Leu Pro Ala Ser Pro Leu Met Lys Asn Phe Asp Thr Ser Gln Trp
65                  70                  75                  80
Glu Asp Ile Lys Leu Val Asp Val Asp Lys Leu Ser Leu Pro Gln Asp
                85                  90                  95
Thr Gly Thr Phe Ile Ser Lys Ile Pro Trp Ser Phe Tyr Lys Leu Phe
            100                 105                 110
Leu Leu Ile Leu Leu Leu Leu Gly Leu Val Ile Val Phe Gly Pro Thr Met
        115                 120                 125
Phe Leu Glu Trp Ser Leu Phe Asp Asp Leu Ala Thr Trp Lys Gly Cys
    130                 135                 140
Leu Ser Asn Phe Ser Ser Tyr Leu Thr Lys Thr Ala Asp Phe Ile Glu
145                 150                 155                 160
Gln Ser Val Phe Tyr Trp Glu Gln Val Thr Asp Gly Phe Phe Ile Phe
                165                 170                 175
Asn Glu Arg Phe Lys Asn Phe Thr Leu Val Val Leu Asn Asn Val Ala
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<213> Homo sapiens

<220>
<221> CDS
<222> (52)..(465)

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<212> PRT
<213> Homo sapiens

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35 40 45
His Pro Ala Pro Thr Arg Gly Ala Leu Thr Phe Trp Ala Pro Gly Ser
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Ala Pro Arg Leu Pro His Pro Ala Ala Arg Ala Arg Arg Arg Ala Trp
85 90 95
His Gly Ala Arg Leu Pro Gly Ser Pro Ala Arg Ala Gly Arg Thr Phe
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09/25/2006 05:45:59 PM

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<222> (74)..(655)

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<212> PRT
<213> Homo sapiens

<400> 12492

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Cys	Ile	Gln	His	Thr	Glu	Asp	Met	Glu	Asn	Glu	Ile	Asp	Glu	Leu	Leu
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<212> DNA
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<220>
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<222> (54)..(836)

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<211> 261
<212> PRT
<213> Homo sapiens

<400> 12494
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Leu Phe Arg Ser Gly Val Lys Gly Ala Phe Cys Ala Gly Ala Asp Leu
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Lys Glu Arg Glu Gln Met Ser Glu Ala Glu Val Gly Val Phe Val Gln
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Arg Leu Arg Gly Leu Met Asn Asp Ile Ala Ser Ser Ala Val Met Gly
        115                 120                 125
Leu Ile Glu Thr Thr Arg Gly Leu Leu Pro Gly Ala Gly Gly Thr Gln
    130                 135                 140
Arg Leu Pro Arg Cys Leu Gly Val Ala Leu Ala Lys Glu Leu Ile Phe
145                 150                 155                 160
Thr Gly Arg Arg Leu Ser Gly Thr Glu Ala His Val Leu Gly Leu Val
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Asn His Ala Val Ala Gln Asn Glu Glu Gly Asp Ala Ala Tyr Gln Arg
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Ala Arg Ala Leu Ala Gln Glu Ile Leu Pro Gln Ala Pro Ile Ala Val
        195                 200                 205
Arg Leu Gly Lys Val Ala Ile Asn Arg Gly Thr Glu Val Asp Ile Ala
    210                 215                 220
Ser Gly Met Ala Ile Glu Gly Met Cys Tyr Ala Gln Asn Ile Pro Thr
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<212> DNA
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<400> 12495

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<220>
<221> CDS
<222> (36)..(1067)

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09/25/2006 09:50 FAX

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<400> 12497

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    50                  55                  60
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65                  70                  75                  80
Glu Asp Ala Gly Arg Ile Leu Ile Glu Glu Leu Arg Asp Arg Phe Pro
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Tyr Leu Ser Glu Ser Tyr Leu Ile Thr Thr Asp Ala Ala Gly Ser Ile
            100                 105                 110
Ala Thr Ala Thr Pro Asp Gly Gly Val Val Leu Ile Ser Gly Thr Gly
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Ser Asn Cys Arg Leu Ile Asn Pro Asp Gly Ser Glu Ser Gly Cys Gly
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Gln Val Pro Asp Arg Leu Gly Ile Leu Thr His Leu Tyr Arg Asp Phe
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Asp Lys Cys Arg Phe Ala Gly Phe Cys Arg Lys Ile Ala Glu Gly Ala
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Gln Gln Gly Asp Pro Leu Ser Arg Tyr Ile Phe Arg Lys Ala Gly Glu
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Trp Lys Ser Trp Glu Leu Leu Lys Glu Gly Phe Leu Leu Val Leu Thr
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Gln Gly Arg Glu Ile Gln Ala Gln Asn Phe Phe Ser Ser Phe Thr Leu
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<210> 12498
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<212> DNA
<213> Homo sapiens

<220>
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<222> (12)..(785)

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<210> 12499
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<212> PRT
<213> Homo sapiens

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Leu Ser Lys Met Pro His Ser Val Pro Gln Pro Leu Val Glu Lys Thr
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Asp Asp Asp Val Ile Gly Gln Ala Pro Ala Glu Ala Ser Pro Pro Pro
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Ile Ala Pro Lys Pro Val Thr Ile Pro Ala Ser Gln Val Ser Thr Gln
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Asn Leu Lys Thr Leu Lys Thr Phe Gly Ala Pro Arg Pro Tyr Ser Ser
100 105 110
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Pro Pro Ala Asn Thr Glu Glu Gly Lys Thr His Ser Val Asn Lys Phe
145 150 155 160
Val Asp Ile Pro Gln Leu Gly Val Ser Asp Lys Glu Asn Asn Ser Ala
165 170 175
His Asn Glu Gln Asn Ser Gln Ile Pro Thr Pro Thr Asp Gly Pro Ser
180 185 190
Phe Thr Val Met Arg Gln Ser Ser Leu Thr Phe Gln Ser Ser Asp Pro
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<212> PRT
<213> Homo sapiens

<400> 12501
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35 40 45
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            100                 105                 110
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<400> 12502

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<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (7)..(765)

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<212> PRT
<213> Homo sapiens

<400> 12504
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35 40 45
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50 55 60
Arg Glu Asp Gln Gln Asp Glu Glu Lys Met Pro Asp Pro Leu Asp Val
65 70 75 80
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85 90 95
Arg Glu Pro Gly Ala Ala Leu Leu Lys Phe Thr Pro Gly Ala Val Met
100 105 110
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115 120 125
Lys Val Lys Glu Thr Cys Gln Arg Leu Leu Glu Lys Pro Lys Asp Ala
130 135 140
Asp Asn Leu Phe Glu His Glu Leu Gly Ala Leu Asn Met Ala Ala Leu
145 150 155 160
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165 170 175
Cys Lys Ala Leu Cys Phe Arg Arg Asp Ser Ala Ile Arg Lys Gln Leu
180 185 190
Val Lys Asn Glu Lys Gly Thr Ile Lys Gln Ala Tyr Thr Ser Ala Pro
195 200 205
Met Val Asp Asn Glu Leu Leu Arg Leu Ser Leu Arg Leu Phe Lys Arg
210 215 220
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US 2003/0096360 A1

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<211> 1966
<212> DNA
<213> Homo sapiens

<220>
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<212> PRT

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<213> Homo sapiens

<400> 12506

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Asp Met Arg Asn Leu Arg Leu Ala Tyr Lys Gln Glu Glu Gln Ser Lys
 65                  70                  75                  80
Leu Gly Ile Phe Glu Asn Leu Asn Lys His Ala Phe Pro Leu Ser Asn
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Gly Gln Ala Leu Phe Ala Phe Ser Tyr Lys Glu Lys Phe Pro Ile Asn
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Pro Asn Glu Ser Trp Lys Ile Ser Lys Ile Asn Ser Asn Tyr Glu Phe
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Cys Asp Thr Tyr Pro Ala Ile Ile Val Val Pro Thr Ser Val Lys Asp
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Asp Asp Leu Ser Lys Val Ala Ala Phe Arg Ala Lys Gly Arg Val Pro
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Val Leu Ser Trp Ile His Pro Glu Ser Gln Ala Thr Ile Thr Arg Cys
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Ser Gln Pro Leu Val Gly Pro Asn Asp Lys Arg Cys Lys Glu Asp Glu
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Lys Tyr Leu Gln Thr Ile Met Asp Ala Asn Ala Gln Ser His Lys Leu
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Ile Ile Phe Asp Ala Arg Gln Asn Ser Val Ala Asp Thr Asn Lys Met
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<212> DNA
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<220>
<221> CDS
<222> (257)..(1786)

<400> 12507

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ctcccttccc taggcctggc tccttctgtt gacatgggag attttagctc atcttggggg 1860
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0050250 - 0050250

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<210> 12508
<211> 510
<212> PRT
<213> Homo sapiens

<400> 12508
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Glu Leu Gly Thr Ser Asp Val Val Thr Val Val Leu Gly Gln Asp Ala
35 40 45
Lys Leu Pro Cys Phe Tyr Arg Gly Asp Ser Gly Glu Gln Val Gly Gln
50 55 60
Val Ala Trp Ala Arg Val Asp Ala Gly Glu Gly Ala Gln Glu Leu Ala
65 70 75 80
Leu Leu His Ser Lys Tyr Gly Leu His Val Ser Pro Ala Tyr Glu Gly
85 90 95
Arg Val Glu Gln Pro Pro Pro Pro Arg Asn Pro Leu Asp Gly Ser Val
100 105 110
Leu Leu Arg Asn Ala Val Gln Ala Asp Glu Gly Glu Tyr Glu Cys Arg
115 120 125
Val Ser Thr Phe Pro Ala Gly Ser Phe Gln Ala Arg Leu Arg Leu Arg
130 135 140
Val Leu Val Pro Pro Leu Pro Ser Leu Asn Pro Gly Pro Ala Leu Glu
145 150 155 160
Glu Gly Gln Gly Leu Thr Leu Ala Ala Ser Cys Thr Ala Glu Gly Ser
165 170 175
Pro Ala Pro Ser Val Thr Trp Asp Thr Glu Val Lys Gly Thr Thr Ser
180 185 190
Ser Arg Ser Phe Lys His Ser Arg Ser Ala Ala Val Thr Ser Glu Phe

0056305-020800

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His Leu Val Pro Ser Arg Ser Met Asn Gly Gln Pro Leu Thr Cys Val
    210                 215                 220
Val Ser His Pro Gly Leu Leu Gln Asp Gln Arg Ile Thr His Ile Leu
225                 230                 235                 240
His Val Ser Phe Leu Ala Glu Ala Ser Val Arg Gly Leu Glu Asp Gln
                245                 250                 255
Asn Leu Trp His Ile Gly Arg Glu Gly Ala Met Leu Lys Cys Leu Ser
            260                 265                 270
Glu Gly Gln Pro Pro Pro Ser Tyr Asn Trp Thr Arg Leu Asp Gly Pro
        275                 280                 285
Leu Pro Ser Gly Val Arg Val Asp Gly Asp Thr Leu Gly Phe Pro Pro
    290                 295                 300
Leu Thr Thr Glu His Ser Gly Ile Tyr Val Cys His Val Ser Asn Glu
305                 310                 315                 320
Phe Ser Ser Arg Asp Ser Gln Val Thr Val Asp Val Leu Asp Pro Gln
                325                 330                 335
Glu Asp Ser Gly Lys Gln Val Asp Leu Val Ser Ala Ser Val Val Val
            340                 345                 350
Val Gly Val Ile Ala Ala Leu Leu Phe Cys Leu Leu Val Val Val Val
        355                 360                 365
Val Leu Met Ser Arg Tyr His Arg Arg Lys Ala Gln Gln Met Thr Gln
    370                 375                 380
Lys Tyr Glu Glu Glu Leu Thr Leu Thr Arg Glu Asn Ser Ile Arg Arg
385                 390                 395                 400
Leu His Ser His His Thr Asp Pro Arg Ser Gln Pro Glu Glu Ser Val
                405                 410                 415
Gly Leu Arg Ala Glu Gly His Pro Asp Ser Leu Lys Asp Asn Ser Ser
            420                 425                 430
Cys Ser Val Met Ser Glu Glu Pro Glu Gly Arg Ser Tyr Ser Thr Leu
        435                 440                 445
Thr Thr Val Arg Glu Ile Glu Thr Gln Thr Glu Leu Leu Ser Pro Gly
    450                 455                 460
Ser Gly Arg Ala Glu Glu Glu Glu Asp Gln Asp Glu Gly Ile Lys Gln
465                 470                 475                 480
Ala Met Asn His Phe Val Gln Glu Asn Gly Thr Leu Arg Ala Lys Pro
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Thr Gly Asn Gly Ile Tyr Ile Asn Gly Arg Gly His Leu Val
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS

05052005-050520050

<222> (294)..(1364)

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gagaacaacc accacgtttt gctcaacctg ggacatttga atttgagtat gcatctcgat 1020
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<210> 12510
<211> 357
<212> PRT
<213> Homo sapiens

<400> 12510
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20 25 30
Ser Phe Leu Lys Pro Gly Glu Lys Thr Tyr Thr Gln Arg Cys Arg Leu
35 40 45
Phe Val Gly Asn Leu Pro Thr Asp Ile Thr Glu Glu Asp Phe Lys Arg
50 55 60

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Leu Phe Glu Arg Tyr Gly Glu Pro Ser Glu Val Phe Ile Asn Arg Asp
 65                  70                  75                  80
Arg Gly Phe Gly Phe Ile Arg Leu Glu Ser Arg Thr Leu Ala Glu Ile
                85                  90                  95
Ala Lys Ala Glu Leu Asp Gly Thr Ile Leu Lys Ser Arg Pro Leu Arg
            100                 105                 110
Ile Arg Phe Ala Thr His Gly Ala Ala Leu Thr Val Lys Asn Leu Ser
        115                 120                 125
Pro Val Val Ser Asn Glu Leu Leu Glu Gln Ala Phe Ser Gln Phe Gly
    130                 135                 140
Pro Val Glu Lys Ala Val Val Val Val Asp Asp Arg Gly Arg Ala Thr
145                 150                 155                 160
Gly Lys Gly Phe Val Glu Phe Ala Ala Lys Pro Pro Ala Arg Lys Ala
                165                 170                 175
Leu Glu Arg Cys Gly Asp Gly Ala Phe Leu Leu Thr Thr Thr Pro Arg
            180                 185                 190
Pro Val Ile Val Glu Pro Met Glu Gln Phe Asp Asp Glu Asp Gly Leu
        195                 200                 205
Pro Glu Lys Leu Met Gln Lys Thr Gln Gln Tyr His Lys Glu Arg Glu
    210                 215                 220
Gln Pro Pro Arg Phe Ala Gln Pro Gly Thr Phe Glu Phe Glu Tyr Ala
225                 230                 235                 240
Ser Arg Trp Lys Ala Leu Asp Glu Met Glu Lys Gln Gln Arg Glu Gln
                245                 250                 255
Val Asp Arg Asn Ile Arg Glu Ala Lys Glu Lys Leu Glu Ala Glu Met
            260                 265                 270
Glu Ala Ala Arg His Glu His Gln Leu Met Leu Met Arg Gln Asp Leu
        275                 280                 285
Met Arg Arg Gln Glu Glu Leu Arg Arg Leu Glu Glu Leu Arg Asn Gln
    290                 295                 300
Glu Leu Gln Lys Arg Lys Gln Ile Gln Leu Arg His Glu Glu Glu His
305                 310                 315                 320
Arg Arg Arg Glu Glu Glu Met Ile Arg His Arg Glu Gln Glu Glu Leu
                325                 330                 335
Arg Arg Gln Gln Glu Gly Phe Lys Pro Asn Tyr Met Glu Asn Gly Asp
            340                 345                 350
Lys Arg Lys Cys Gly
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<211> 2022
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (181)..(672)

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<400> 12511
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caaagggaaa cctgggaaga agcagctctt cacctgaaaa atgttcactt tgcctcagtt 420
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gagtgggttc cttgggaaga actacctccc ctggaccagc ttttctgggg actgcgttgt 600
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<210> 12512
<211> 164
<212> PRT
<213> Homo sapiens

<400> 12512
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Gly Val Val Val Thr Ser Cys Lys His Pro Arg Cys Val Leu Leu Gly
20 25 30

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Lys Arg Lys Gly Ser Val Gly Ala Gly Ser Phe Gln Leu Pro Gly Gly
          35                  40                  45
His Leu Glu Phe Gly Glu Thr Trp Glu Glu Cys Ala Gln Arg Glu Thr
      50                  55                  60
Trp Glu Glu Ala Ala Leu His Leu Lys Asn Val His Phe Ala Ser Val
 65                  70                  75                  80
Val Asn Ser Phe Ile Glu Lys Glu Asn Tyr His Tyr Val Thr Ile Leu
                 85                  90                  95
Met Lys Gly Glu Val Asp Val Thr His Asp Ser Glu Pro Lys Asn Val
            100                 105                 110
Glu Pro Glu Lys Asn Glu Ser Trp Glu Trp Val Pro Trp Glu Glu Leu
        115                 120                 125
Pro Pro Leu Asp Gln Leu Phe Trp Gly Leu Arg Cys Leu Lys Glu Gln
    130                 135                 140
Gly Tyr Asp Pro Phe Lys Glu Asp Leu Asn His Leu Val Gly Tyr Lys
145                 150                 155                 160
Gly Asn His Leu
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<210> 12513
<211> 1957
<212> DNA
<213> Homo sapiens

<400> 12513
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<210> 12514
<211> 2244
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (632)..(937)

<400> 12514
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09513650.0N2000

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<210> 12515
<211> 102
<212> PRT
<213> Homo sapiens

<400> 12515
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20 25 30
Ser Tyr His Thr Trp Pro Phe Phe Phe Phe Phe Phe Phe Glu Ile Glu
35 40 45
Ser His Ser Val Thr Arg Ile Val Val Gln Trp Arg Ile Leu Ala His
50 55 60
Cys Asn Leu Pro Phe Leu Gly Ser Gly Asp Pro Pro Thr Ser Ala Ser
65 70 75 80
Gln Val Ala Arg Thr Thr Gly Met Cys His His Ala Trp Leu Val Phe
85 90 95
Val Tyr Val Cys Val Leu
100

<210> 12516
<211> 2076
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (11)..(406)

<400> 12516
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0509050.0508800

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<212> PRT
<213> Homo sapiens

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35 40 45

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Glu Ser Met Phe Pro Ile Pro Ser Gln Phe Glu Leu Pro Arg Glu Tyr
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65 70 75 80
Arg Asp Lys Leu Lys Phe Trp Thr His Cys Val Leu Ala Thr Leu Ile
85 90 95
Met Phe Thr Ile Phe Ser Phe Phe Ala Glu Gln Leu Ile Ala Leu Lys
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Arg Lys Ile Phe Pro Arg Arg Arg Ile His Lys Glu Ala Ser Pro Asn
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Arg Ile Arg Val
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<212> DNA
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<222> (976)..(1926)

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<211> 317
<212> PRT
<213> Homo sapiens

<400> 12519
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Tyr Lys Leu Val Lys Thr Gly Ser Val Val Leu Thr Ala Ser Thr Asp
35 40 45
Leu Arg Gly Tyr Val Val Gly Gln Ala Leu Gln Leu His Ala Asp Val
50 55 60
Glu Asn Gln Ser Gly Lys Asp Thr Ser Pro Val Val Ala Ser Leu Leu
65 70 75 80
Gln Lys Val Ser Tyr Lys Ala Lys Arg Trp Ile His Asp Val Arg Thr
85 90 95
Ile Ala Glu Val Glu Gly Ala Gly Val Lys Ala Trp Arg Arg Ala Gln
100 105 110
Trp His Glu Gln Ile Leu Val Pro Ala Leu Pro Gln Ser Ala Leu Pro
115 120 125
Gly Cys Ser Leu Ile His Ile Asp Tyr Tyr Leu Gln Val Ser Leu Lys
130 135 140
Ala Pro Glu Ala Thr Val Thr Leu Pro Val Phe Ile Gly Asn Ile Ala
145 150 155 160
Val Asn His Ala Pro Val Ser Pro Arg Pro Gly Leu Gly Leu Pro Pro
165 170 175
Gly Ala Pro Pro Leu Val Val Pro Ser Ala Pro Pro Gln Glu Glu Ala
180 185 190
Glu Ala Glu Ala Ala Ala Gly Gly Pro His Phe Leu Asp Pro Val Phe
195 200 205
Leu Ser Thr Lys Ser His Ser Gln Arg Gln Pro Leu Leu Ala Thr Leu

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    210                 215                 220
Ser Ser Val Pro Gly Ala Pro Glu Pro Cys Pro Gln Asp Gly Ser Pro
225                 230                 235                 240
Ala Ser His Pro Leu His Pro Pro Leu Cys Ile Ser Thr Gly Ala Thr
                245                 250                 255
Val Pro Tyr Phe Ala Glu Gly Ser Gly Gly Pro Val Pro Thr Thr Ser
            260                 265                 270
Thr Leu Ile Leu Pro Pro Glu Tyr Ser Ser Trp Gly Tyr Pro Tyr Gly
        275                 280                 285
Glu Ser Thr Ala Arg Ala Trp Gln Gly Gly Asp Ala Lys Ser Pro Thr
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Gln Thr Leu Leu Ser Ser Arg Arg Gly Pro Thr Val Leu
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<210> 12520
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (722)..(2062)

<400> 12520

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<211> 447
<212> PRT
<213> Homo sapiens

<400> 12521
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35 40 45
Phe Ser Leu Asp Leu Glu Ala Asp Gly Gln Pro Leu Thr Pro Asp Glu
50 55 60
Tyr Leu Glu Tyr Ser Leu Lys Leu Thr Gln Gly Thr Ser Gln Lys Asp
65 70 75 80
Lys Asn Phe Asn Leu Pro Arg Leu Cys Ile Arg Lys Phe Phe Pro Lys
85 90 95
Lys Lys Cys Phe Val Phe Asp Leu Pro Ile His Arg Arg Lys Leu Ala
100 105 110
Gln Leu Glu Lys Leu Gln Asp Glu Glu Leu Asp Pro Glu Phe Val Gln
115 120 125
Gln Val Ala Asp Phe Cys Ser Tyr Ile Phe Ser Asn Ser Lys Thr Lys
130 135 140
Thr Leu Ser Gly Gly Ile Lys Val Asn Gly Pro Arg Leu Glu Ser Leu
145 150 155 160
Val Leu Thr Tyr Ile Lys Ala Ile Ser Arg Gly Asp Leu Pro Cys Met
165 170 175
Glu Asn Ala Val Leu Ala Leu Ala Gln Ile Glu Asn Ser Ala Ala Val
180 185 190
Gln Lys Ala Ile Ala His Tyr Asp Gln Gln Met Gly Gln Lys Val Gln
195 200 205
Leu Pro Ala Glu Thr Leu Gln Glu Leu Leu Asp Leu His Arg Val Ser
210 215 220

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Asp His Leu Phe Gln Lys Lys Leu Ala Ala Gln Leu Asp Lys Lys Arg
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Asp Asp Phe Cys Lys Gln Asn Gln Glu Ala Ser Ser Asp Arg Cys Ser
            260                 265                 270
Ala Leu Leu Gln Val Ile Phe Ser Pro Leu Glu Glu Glu Val Lys Ala
        275                 280                 285
Gly Ile Tyr Ser Lys Pro Gly Gly Tyr Cys Leu Phe Ile Gln Lys Leu
    290                 295                 300
Gln Asp Leu Glu Lys Lys Tyr Tyr Glu Glu Pro Arg Lys Gly Ile Gln
305                 310                 315                 320
Ala Glu Glu Ile Leu Gln Thr Tyr Leu Lys Ser Lys Glu Ser Val Thr
                325                 330                 335
Asp Ala Ile Leu Gln Thr Asp Gln Ile Leu Thr Glu Lys Glu Lys Glu
            340                 345                 350
Ile Glu Val Glu Cys Val Lys Ala Glu Ser Ala Gln Ala Ser Ala Lys
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Met Val Glu Glu Met Gln Ile Lys Tyr Gln Gln Met Met Glu Glu Lys
    370                 375                 380
Glu Lys Ser Tyr Gln Glu His Val Lys Gln Leu Thr Glu Lys Met Glu
385                 390                 395                 400
Arg Glu Arg Ala Gln Leu Leu Glu Glu Gln Glu Lys Thr Leu Thr Ser
                405                 410                 415
Lys Leu Gln Glu Gln Ala Arg Val Leu Lys Glu Arg Cys Gln Gly Glu
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Ser Thr Gln Leu Gln Asn Glu Ile Gln Lys Leu Gln Lys Thr Leu
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<211> 2393
<212> DNA
<213> Homo sapiens

<220>
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<222> (362)..(1267)

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<211> 302
<212> PRT
<213> Homo sapiens

<400> 12523
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35 40 45
Asn Pro His Thr Asp His Trp Ser Phe Leu Ala Pro Met Arg Thr Pro
50 55 60

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Arg Ala Arg Phe Gln Met Ala Val Leu Met Gly Gln Leu Tyr Val Val
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Gly Gly Ser Asn Gly His Ser Asp Asp Leu Ser Cys Gly Glu Met Tyr
85 90 95
Asp Ser Asn Ile Asp Asp Trp Ile Pro Val Pro Glu Leu Arg Thr Asn
100 105 110
Arg Cys Asn Ala Gly Val Cys Ala Leu Asn Gly Lys Leu Tyr Ile Val
115 120 125
Gly Gly Ser Asp Pro Tyr Gly Gln Lys Gly Leu Lys Asn Cys Asp Val
130 135 140
Phe Asp Pro Val Thr Lys Leu Trp Thr Ser Cys Ala Pro Leu Asn Ile
145 150 155 160
Arg Arg His Gln Ser Ala Val Cys Glu Leu Gly Gly Tyr Leu Tyr Ile
165 170 175
Ile Gly Gly Ala Glu Ser Trp Asn Cys Leu Asn Thr Val Glu Arg Tyr
180 185 190
Asn Pro Glu Asn Asn Thr Trp Thr Leu Ile Ala Pro Met Asn Val Ala
195 200 205
Arg Arg Gly Ala Gly Val Ala Val Leu Asn Gly Lys Leu Phe Val Cys
210 215 220
Gly Gly Phe Asp Gly Ser His Ala Ile Ser Cys Val Glu Met Tyr Asp
225 230 235 240
Pro Thr Arg Asn Glu Trp Lys Met Met Gly Asn Met Thr Ser Pro Arg
245 250 255
Ser Asn Ala Gly Ile Ala Thr Val Gly Asn Thr Ile Tyr Ala Val Gly
260 265 270
Gly Phe Asp Gly Asn Glu Phe Leu Asn Thr Val Glu Val Tyr Asn Leu
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Glu Ser Asn Glu Trp Ser Pro Tyr Thr Lys Ile Phe Gln Phe
290 295 300

<210> 12524
<211> 2010
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (323)..(733)

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35 40 45
Phe Cys Val Leu Gly Ile Val Leu Leu Val Thr Gly Ile Val Thr Ser
50 55 60
Ile Val Leu Tyr Phe Gln Tyr Val Tyr Trp Leu His Met Leu Tyr Ala
65 70 75 80
Ala Leu Gly Ala Ile Cys Phe Thr Leu Phe Leu Ala Tyr Asp Thr Gln
85 90 95

Leu Val Leu Gly Asn Arg Lys His Thr Ile Ser Pro Glu Asp Tyr Ile
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Thr Gly Ala Leu Gln Ile Tyr Thr Asp Ile Ile Tyr Ile Phe Thr Phe
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Val Leu Gln Leu Met Gly Asp Arg Asn
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<212> PRT
<213> Homo sapiens

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35 40 45
Gly Gln Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu
50 55 60
Phe Glu Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg
65 70 75 80
Ala Ile Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu
85 90 95
Asp Met Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala
100 105 110
Ala Thr Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn
115 120 125
Val Thr Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys
130 135 140
Leu Glu Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu
145 150 155 160
Lys His Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys
165 170 175
Ile Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile
180 185 190
Thr Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys
195 200 205
Ala Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile
210 215 220
Ala Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe
225 230 235 240
Pro Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala
245 250 255
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Ala Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val

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Gln Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg
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Arg Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp
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Asn Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu
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Arg Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu
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Leu Arg Thr Val Ser Met Leu Glu Tyr Phe Ile Asn Arg Ser Trp Glu
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Trp Ser Thr Tyr Asn Thr Glu Met Leu Met Ser Glu Leu Ser Pro Glu
                405                 410                 415
Asp Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu
            420                 425                 430
Tyr Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu
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Asp Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg
    450                 455                 460
Asn Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg
465                 470                 475                 480
Leu Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile
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<211> 2201
<212> DNA
<213> Homo sapiens

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<211> 233
<212> PRT
<213> Homo sapiens

<400> 12530

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		35					40					45			
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	50					55					60				
Ser	Ser	Leu	Val	Lys	Ser	Gly	Thr	Tyr	Lys	Glu	Thr	Glu	Phe	Met	Val
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Lys	Glu	Gly	Glu	Arg	Lys	Gln	Gln	Asn	Phe	Asp	Lys	Lys	Arg	Lys	Ala
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Lys	Thr	Asn	Lys	Lys	Met	Asp	His	Ile	Lys	Lys	Arg	Lys	Thr	Glu	Asn
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Tyr Tyr Thr His Glu Lys Gln Glu Lys Gly Thr Leu Asn Ser Asn Ala
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Ala Tyr Glu Gln Ser His Phe Phe Asn Lys Asn Tyr Thr Glu Asp Ile
            180                 185                 190
Phe Pro Val Thr Pro Pro Glu Leu Glu Glu Thr Ile Arg Asp Glu Lys
        195                 200                 205
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (71)..(1180)

<400> 12531

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<211> 370
<212> PRT
<213> Homo sapiens

<400> 12532

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Val Asn Trp Leu Pro Pro Gly Tyr Val Val Asn Gln Asp Lys Ser Asn
        35                  40                  45
Thr Asp Lys Trp Glu Lys Asp Glu Met Thr Lys Asp Cys Met Leu Ala
    50                  55                  60
Asn Gly Lys Leu Asp Glu Asp Tyr Glu Glu Glu Asp Glu Glu Glu Glu
65                  70                  75                  80
Ser Leu Met Trp Arg Ala Pro Lys Glu Glu Ala Asp Tyr Glu Asp Asp
                85                  90                  95
Phe Leu Glu Tyr Asp Gln Glu His Ile Arg Phe Ile Asp Ser Met Leu
            100                 105                 110
Met Gly Ser Gly Ala Phe Val Lys Lys Ile Ser Leu Ser Pro Phe Ser
        115                 120                 125
Thr Thr Asp Ser Ala Tyr Glu Trp Lys Met Pro Lys Lys Ser Ser Leu
    130                 135                 140
Gly Ser Met Pro Phe Ser Ser Asp Phe Glu Asp Phe Asp Tyr Ser Ser
145                 150                 155                 160
Trp Asp Ala Met Cys Tyr Leu Asp Pro Ser Lys Ala Val Glu Glu Asp
                165                 170                 175
Asp Phe Val Val Gly Phe Trp Asn Pro Ser Glu Glu Asn Cys Gly Val
            180                 185                 190
Asp Thr Gly Lys Gln Ser Ile Ser Tyr Asp Leu His Thr Glu Gln Cys
        195                 200                 205
Ile Ala Asp Lys Ser Ile Ala Asp Cys Val Glu Ala Leu Leu Gly Cys
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Tyr Leu Thr Ser Cys Gly Glu Arg Ala Ala Gln Leu Phe Leu Cys Ser
225                 230                 235                 240
Leu Gly Leu Lys Val Leu Pro Val Ile Lys Arg Thr Asp Arg Glu Lys
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Ala Leu Cys Pro Thr Arg Glu Asn Phe Asn Ser Gln Gln Lys Asn Leu
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Ser Val Ser Cys Ala Ala Ala Ser Val Ala Ser Ser Arg Ser Ser Val
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Phe Asp His Pro Asp Ala Asp Lys Thr Leu Asn His Leu Ile Ser Gly
305                 310                 315                 320
Phe Glu Asn Phe Glu Lys Lys Ile Asn Tyr Arg Phe Lys Asn Lys Ala
                325                 330                 335
Tyr Leu Leu Gln Ala Phe Thr His Ala Ser Tyr His Tyr Asn Thr Ile
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Thr Gly Lys Glu Pro Thr Thr Arg Leu His Phe Trp Glu Asn Glu Thr
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<210> 12533
<211> 2002
<212> DNA
<213> Homo sapiens

<400> 12533

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aatgtttgtc accagatttt tattaatgta aaaaaaatca atttttaaaa aatagttgga 300
ctttggcagc ttttaaggaa agttggaggt gttttaggat tgctatcaat tttcagcatt 360
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<210> 12534
<211> 1056
<212> DNA
<213> Homo sapiens

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<211> 1115
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (48)..(599)

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<210> 12536
<211> 184
<212> PRT
<213> Homo sapiens

<400> 12536

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			20					25					30		
Val	Leu	Arg	Arg	Tyr	Arg	Leu	Gln	Arg	Arg	Glu	Asp	Tyr	Thr	Arg	Tyr
		35					40					45			
Asn	Gln	Leu	Ser	Arg	Ala	Val	Arg	Glu	Leu	Ala	Arg	Arg	Leu	Arg	Asp
	50					55					60				
Leu	Pro	Glu	Arg	Asp	Gln	Phe	Arg	Val	Arg	Ala	Ser	Ala	Ala	Leu	Leu
65					70					75					80
Asp	Lys	Leu	Tyr	Ala	Leu	Gly	Leu	Val	Pro	Thr	Arg	Gly	Ser	Leu	Glu
				85					90					95	
Leu	Cys	Asp	Phe	Val	Thr	Ala	Ser	Ser	Phe	Cys	Arg	Arg	Arg	Leu	Pro
			100					105					110		
Thr	Val	Leu	Leu	Lys	Leu	Arg	Met	Ala	Gln	His	Leu	Gln	Ala	Ala	Val
		115					120					125			
Ala	Phe	Val	Glu	Gln	Gly	His	Val	Arg	Val	Gly	Pro	Asp	Val	Val	Thr
	130					135					140				
Asp	Pro	Ala	Phe	Leu	Val	Thr	Arg	Ser	Met	Glu	Asp	Phe	Val	Thr	Trp
145					150					155					160
Val	Asp	Ser	Ser	Lys	Ile	Lys	Arg	His	Val	Leu	Glu	Tyr	Asn	Glu	Glu
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<210> 12537
<211> 1800
<212> DNA
<213> Homo sapiens

<220>
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<222> (6)..(1343)

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<210> 12538
<211> 446
<212> PRT
<213> Homo sapiens

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<400> 12538

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            20                  25                  30
Leu Asn Val Val Asp Lys Ile His Gln Asn Thr Pro Leu His Trp Ala
        35                  40                  45
Val Ala Ala Gly Asn Val Asn Ala Val Asp Lys Leu Leu Glu Ala Gly
    50                  55                  60
Ser Ser Leu Asp Ile Gln Asn Val Lys Gly Glu Thr Pro Leu Asp Met
65                  70                  75                  80
Ala Leu Gln Asn Lys Asn Gln Leu Ile Ile His Met Leu Lys Thr Glu
                85                  90                  95
Ala Lys Met Arg Ala Asn Gln Lys Phe Arg Leu Trp Arg Trp Leu Gln
            100                 105                 110
Lys Cys Glu Leu Phe Leu Leu Leu Met Leu Ser Val Ile Thr Met Trp
        115                 120                 125
Ala Ile Gly Tyr Ile Leu Asp Phe Asn Ser Asp Ser Trp Leu Leu Lys
    130                 135                 140
Gly Cys Leu Leu Val Thr Leu Phe Phe Leu Thr Ser Leu Phe Pro Arg
145                 150                 155                 160
Phe Leu Val Gly Tyr Lys Asn Leu Val Tyr Leu Pro Thr Ala Phe Leu
                165                 170                 175
Leu Ser Ser Val Phe Trp Ile Phe Met Thr Trp Phe Ile Leu Phe Phe
            180                 185                 190
Pro Asp Leu Ala Gly Ala Pro Phe Tyr Phe Ser Phe Ile Phe Ser Ile
        195                 200                 205
Val Ala Phe Leu Tyr Phe Phe Tyr Lys Thr Trp Ala Thr Asp Pro Gly
    210                 215                 220
Phe Thr Lys Ala Ser Glu Glu Glu Lys Lys Val Asn Ile Ile Thr Leu
225                 230                 235                 240
Ala Glu Thr Gly Ser Leu Asp Phe Arg Thr Phe Cys Thr Ser Cys Leu
                245                 250                 255
Ile Arg Lys Pro Leu Arg Ser Leu His Cys His Val Cys Asn Cys Cys
            260                 265                 270
Val Ala Arg Tyr Asp Gln His Cys Leu Trp Thr Gly Arg Cys Ile Gly
        275                 280                 285
Phe Gly Asn His His Tyr Tyr Ile Phe Phe Leu Phe Phe Leu Ser Met
    290                 295                 300
Val Cys Gly Trp Ile Ile Tyr Gly Ser Phe Ile Tyr Leu Ser Ser His
305                 310                 315                 320
Cys Ala Thr Thr Phe Lys Glu Asp Gly Leu Trp Thr Tyr Leu Asn Gln
                325                 330                 335
Ile Val Ala Cys Ser Pro Trp Val Leu Tyr Ile Leu Met Leu Ala Thr
            340                 345                 350
Phe His Phe Ser Trp Ser Thr Phe Leu Leu Leu Asn Gln Leu Phe Gln
        355                 360                 365
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Ile Ala Phe Leu Gly Leu Thr Ser His Glu Arg Ile Ser Leu Gln Lys
    370                 375                 380
Gln Ser Lys His Met Lys Gln Thr Leu Ser Leu Arg Lys Thr Pro Tyr
385                 390                 395                 400
Asn Leu Gly Phe Met Gln Asn Leu Ala Asp Phe Phe Gln Cys Gly Cys
                405                 410                 415
Phe Gly Leu Val Lys Pro Cys Val Val Asp Trp Thr Ser Gln Tyr Thr
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Met Val Phe His Pro Ala Arg Glu Lys Val Leu Arg Ser Val
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<211> 1670
<212> DNA
<213> Homo sapiens

<220>
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<211> 134
<212> PRT
<213> Homo sapiens

<400> 12540

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		20					25					30			
Thr	Val	Pro	Leu	Val	Ser	Glu	Ile	Gln	Leu	Met	Ala	Ala	Thr	Gly	Gly
	35					40					45				
Thr	Glu	Leu	Ser	Cys	Tyr	Arg	Cys	Ile	Ile	Pro	Phe	Ala	Val	Val	Val
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Phe	Ile	Ala	Gly	Ile	Val	Val	Thr	Ala	Val	Ala	Tyr	Ser	Phe	Asn	Ser
65				70					75					80	
His	Gly	Ser	Ile	Ile	Ser	Ile	Phe	Gly	Leu	Val	Val	Leu	Ser	Ser	Gly
			85					90					95		
Leu	Phe	Leu	Leu	Ala	Ser	Ser	Ala	Leu	Cys	Trp	Lys	Val	Arg	Gln	Arg
		100					105					110			
Ser	Lys	Lys	Ala	Lys	Arg	Arg	Glu	Ser	Gln	Thr	Ala	Leu	Val	Ala	Asn
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (199)..(1245)

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<212> PRT
<213> Homo sapiens

<400> 12542

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			20					25					30		
Ser	Arg	Gly	Asp	Ile	Leu	Thr	Ile	Leu	Glu	Gln	His	Val	Pro	Glu	Ser
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Glu	Gly	Trp	Trp	Lys	Cys	Leu	Leu	His	Gly	Arg	Gln	Gly	Leu	Ala	Pro
	50					55					60				
Ala	Asn	Arg	Leu	Gln	Ile	Leu	Thr	Glu	Val	Ala	Ala	Asp	Arg	Pro	Cys
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Pro	Pro	Phe	Leu	Arg	Gly	Leu	Glu	Glu	Ala	Pro	Ala	Ser	Ser	Glu	Glu
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Thr	Tyr	Gln	Val	Pro	Thr	Leu	Pro	Arg	Pro	Pro	Thr	Pro	Gly	Pro	Val
			100					105					110		
Tyr	Glu	Gln	Met	Arg	Ser	Trp	Ala	Glu	Gly	Pro	Gln	Pro	Pro	Thr	Ala
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Pro Thr Gln His Arg Gly Pro Val Val Leu Lys Glu Pro Glu Lys Gln
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Gln Leu Tyr Asp Ile Pro Ala Ser Pro Lys Lys Ala Gly Leu His Pro
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Pro Asp Ser Gln Ala Ser Asn Pro Gly Pro Leu Ile Pro Gln Ser Ser
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Ser Gln Gln Thr Pro Glu Arg Lys Pro Arg Leu Ser Glu His Cys Arg
225                 230                 235                 240
Leu Tyr Phe Gly Ala Leu Phe Lys Ala Ile Ser Ala Phe His Gly Ser
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Leu Ser Ser Ser Gln Pro Ala Glu Ile Ile Thr Gln Ser Lys Leu Val
            260                 265                 270
Ile Met Val Gly Gln Lys Leu Val Asp Thr Leu Cys Met Glu Thr Gln
        275                 280                 285
Glu Arg Asp Val Arg Asn Glu Ile Leu Arg Gly Ser Ser His Leu Cys
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Ser Leu Leu Lys Asp Val Ala Leu Ala Thr Lys Asn Ala Val Leu Thr
305                 310                 315                 320
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<213> Homo sapiens

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caattcctgc tgtttttcag atgagaaatt ggacttgaat gacagtaaat gggaagatat 240
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tgctgttaag gacctaatca gacagttgcc aaagccaaac caagacacaa tgcagattct 420
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tatagcaatt gtttttggtc ccactctatt aaaaccagaa aaagagactg gtaatatagc 540

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<212> PRT
<213> Homo sapiens

<400> 12544

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			20					25				30			
Phe	Arg	Glu	Leu	Pro	Glu	Pro	Leu	Phe	Thr	Phe	Asn	His	Phe	Asn	Asp
		35					40					45			
Phe	Val	Asn	Ala	Ile	Lys	Gln	Glu	Pro	Arg	Gln	Arg	Val	Ala	Ala	Val
	50					55					60				
Lys	Asp	Leu	Ile	Arg	Gln	Leu	Pro	Lys	Pro	Asn	Gln	Asp	Thr	Met	Gln
65					70					75					80
Ile	Leu	Phe	Arg	His	Leu	Arg	Arg	Val	Ile	Glu	Asn	Gly	Glu	Lys	Asn
				85					90					95	
Arg	Met	Thr	Tyr	Gln	Ser	Ile	Ala	Ile	Val	Phe	Gly	Pro	Thr	Leu	Leu
			100					105					110		
Lys	Pro	Glu	Lys	Glu	Thr	Gly	Asn	Ile	Ala	Val	His	Thr	Val	Tyr	Gln
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 12547

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			20					25					30		
Lys	Glu	Ala	Glu	Gly	Ala	Gly	Glu	Glu	Ser	Ser	Gly	Val	Asp	Thr	Met
		35					40					45			
Thr	His	Asn	Asn	Phe	Trp	Leu	Lys	Lys	Ile	Glu	Ile	Ser	Val	Ser	Glu
	50					55					60				
Ala	Glu	Lys	Arg	Thr	Gly	Arg	Asn	Ala	Met	Asn	Met	Gln	Glu	Thr	Tyr
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Thr	Ala	Tyr	Leu	Ile	Glu	Thr	Arg	Ser	Val	Glu	His	Thr	Asp	Gly	Gln
				85					90					95	
Ser	Val	Leu	Thr	Asp	Ser	Leu	Trp	Arg	Arg	Tyr	Ser	Glu	Phe	Glu	Leu
			100					105					110		
Leu	Arg	Ser	Tyr	Leu	Leu	Val	Tyr	Tyr	Pro	His	Ile	Val	Val	Pro	Pro
		115					120					125			
Leu	Pro	Glu	Lys	Arg	Ala	Glu	Phe	Val	Trp	His	Lys	Leu	Ser	Ala	Asp
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Phe	Leu	Leu	Arg	Ile	Ala	Ser	His	Pro	Ile	Leu	Cys	Arg	Asp	Lys	Ile
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Phe	Tyr	Leu	Phe	Leu	Thr	Gln	Glu	Gly	Asn	Trp	Lys	Glu	Thr	Val	Asn
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225					230					235					240
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Ser Ile Asp Asp Ile Leu Glu Asp Glu Glu His Tyr Ala Asp Gln Leu
    290                 295                 300
Lys Glu Tyr Leu Phe Tyr Ala Glu Ala Leu Arg Ala Val Cys Arg Lys
305                 310                 315                 320
His Glu Leu Met Gln Tyr Asp Leu Glu Met Ala Ala Gln Asp Leu Ala
                325                 330                 335
Ser Lys Lys Gln Gln Cys Glu Glu Leu Val Thr Gly Thr Val Arg Thr
            340                 345                 350
Phe Ser Leu Lys Gly Met Thr Thr Lys Leu Phe Gly Gln Glu Thr Pro
        355                 360                 365
Glu Gln Arg Glu Ala Arg Ile Lys Val Leu Glu Glu Gln Ile Asn Glu
    370                 375                 380
Gly Glu Gln Gln Leu Lys Ser Lys Asn Leu Glu Gly Arg Glu Phe Val
385                 390                 395                 400
Lys Asn Ala Trp Ala Asp Ile Glu Arg Phe Lys Glu Gln Lys Asn Arg
                405                 410                 415
Asp Leu Lys Glu Ala Leu Ile Ser Tyr Ala Val Met Gln Ile Ser Met
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<400> 12549

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			20					25				30			
Leu	Lys	Thr	Leu	Asn	Thr	Val	Glu	Cys	Tyr	Asn	Pro	Lys	Thr	Lys	Thr
		35					40					45			
Trp	Ser	Val	Met	Pro	Pro	Met	Ser	Thr	His	Arg	His	Gly	Leu	Gly	Val
	50					55					60				
Ala	Val	Leu	Glu	Gly	Pro	Met	Tyr	Ala	Val	Gly	Gly	His	Asp	Gly	Trp
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Ser	Tyr	Leu	Asn	Thr	Val	Glu	Arg	Trp	Asp	Pro	Gln	Ala	Arg	Gln	Trp
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Asn	Phe	Val	Ala	Thr	Met	Ser	Thr	Pro	Arg	Ser	Thr	Val	Gly	Val	Ala
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Val Gly Val Cys Leu Leu Gly Asp Lys Leu Tyr Ala Val Gly Gly Tyr
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Gly Leu Thr Ala Leu Arg Ser Asp Glu Val Ile Asp Leu Met Ile Lys
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Glu Tyr Pro Ala Lys His Ala Glu Tyr Ser Val Ile Leu Gln Glu Lys
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Glu Arg Gln Arg Ile Thr Asp His Tyr Lys Glu Tyr Ser Gln Met Gln
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Lys Lys Ala Ala Lys Lys Ala Ala Glu Phe Asn Ser Asn Leu Asn Arg
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Lys Val Ser Ser Tyr Pro Val Ala Leu Ile Pro Gly Gln Phe Gln Glu
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Tyr Tyr Lys Arg Tyr Ser Pro Asp Glu Leu Arg Tyr Leu Pro Leu Asn
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Thr Ala Leu Tyr Glu Pro Pro Leu Asp Pro Glu Leu Pro Ala Leu Asp
        195                 200                 205
Ser Asp Gly Asp Ser Asp Asp Gly Glu Asp Gly Arg Gly Asp Glu Lys
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Arg Lys Asn Lys Gly Thr Ser Asp Ser Ser Ser Gly Asn Val Ser Glu
225                 230                 235                 240
Gly Glu Ser Pro Pro Asp Ser Gln Glu Asp Ser Phe Gln Gly Arg Gln
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Lys Ser Lys Asp Lys Ala Ala Thr Pro Arg Lys Asp Gly Pro Lys Arg
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Ser Val Leu Ser Lys Ser Val Pro Gly Tyr Lys Pro Lys Val Ile Pro
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Asn Ala Ile Cys Gly Ile Cys Leu Lys Gly Lys Glu Ser Asn Lys Lys
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Gln Pro His His Glu Glu Glu Met Met Phe Cys Asp Met Cys Asp Arg
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Gly Tyr His Thr Phe Cys Val Gly Leu Gly Ala Ile Pro Ser Gly Arg
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<212> DNA
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<400> 12558

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Ser	Gly	Gly	Leu	Thr	Ile	Ser	Ser	Leu	Leu	Lys	Glu	Lys	Glu	Gly	Ser

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        195                 200                 205
Glu Val Ala Lys Phe Thr Leu Glu Glu Leu Cys Leu Ile Cys Asn Ile
    210                 215                 220
Leu Ser Thr Ala Glu Tyr Cys Leu Ala Thr Thr Gln Gln Leu Glu Glu
225                 230                 235                 240
Lys Leu Lys Glu Lys Val Asp Val Ser Leu Ile Glu Arg Ile Asn Leu
                245                 250                 255
Thr Gly Glu Met Asp Thr Phe Ser Thr Val Ile Ser Ser Ser Ile Gln
            260                 265                 270
Leu Leu Val Gln Asp Leu Asp Ala Ala Cys Asp Pro Ala Leu Thr Ala
        275                 280                 285
Met Ser Lys Met Gln Trp Gln Asn Val Glu His Val Gly Asp Gln Ser
    290                 295                 300
Pro Tyr Val Thr Ser Val Ile Leu His Ile Lys Gln Asn Val Pro Ile
305                 310                 315                 320
Ile Arg Asp Asn Leu Ala Ser Thr Arg Lys Tyr Phe Thr Gln Phe Cys
                325                 330                 335
Val Lys Phe Ala Asn Ser Phe Ile Pro Lys Phe Ile Thr His Leu Phe
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<210> 12559
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (81)..(1235)

<400> 12559

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ccagagcctt tcatcctcaa actggattgc ctcttctttc aagccctgtt cctcaaagaa 480
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gggcaagtgg tgctttctgc cccacacatt tgactcttcc agttgaagtg tcattctaca 780
gtgtttcaga tgacaatgct ccctctcctt atatgggtgt gattacttta gagtcccttg 840
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<211> 385
<212> PRT
<213> Homo sapiens

<400> 12560

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			20					25					30		
Glu	Asn	Tyr	Leu	Asn	Lys	Asp	Asn	Glu	Gly	Phe	Lys	Cys	Lys	Lys	Ser
		35					40					45			
Asp	Gln	Leu	Lys	Asn	Glu	Gln	Asp	Lys	Gln	Glu	Asp	Pro	Thr	Asn	Glu
	50					55					60				
Lys	Ser	Gln	Asn	Tyr	Ser	Gln	Arg	Arg	Ser	Ile	Lys	Asp	Cys	Leu	Ser
65					70					75					80
Thr	Cys	Glu	Gln	Pro	Lys	Asn	Thr	Glu	Val	Leu	Arg	Thr	Thr	Leu	Lys
				85					90					95	
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			100					105					110		
Ser	Thr	Arg	Ala	Phe	His	Pro	Gln	Thr	Gly	Leu	Pro	Leu	Leu	Ser	Ser
		115					120					125			
Pro	Val	Pro	Gln	Arg	Lys	Thr	Gln	Ser	Gly	Cys	Phe	Asp	Leu	Asp	Ser
	130					135					140				
Ser	Leu	Leu	His	Leu	Lys	Ser	Phe	Ser	Ser	Arg	Ser	Pro	Arg	Pro	Cys
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Leu	Asn	Ile	Glu	Asp	Asp	Pro	Asp	Ile	His	Glu	Lys	Pro	Phe	Leu	Ser
				165					170					175	
Ser	Ser	Ala	Pro	Pro	Ile	Thr	Ser	Leu	Ser	Leu	Leu	Gly	Asn	Phe	Glu
			180					185					190		
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0080200-0080400

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225                 230                 235                 240
Pro Ser Pro Tyr Met Gly Val Ile Thr Leu Glu Ser Leu Gly Lys Arg
                245                 250                 255
Gly Tyr Arg Val Pro Pro Ser Gly Ala Ile Gln Val Thr Leu Phe Asn
            260                 265                 270
Pro Asn Lys Thr Val Val Lys Met Phe Val Val Ile Tyr Asp Leu Arg
        275                 280                 285
Asp Met Pro Ala Asn His Gln Thr Phe Leu Arg Gln Arg Thr Phe Ser
    290                 295                 300
Val Pro Val Lys Gln Glu Val Lys Arg Ser Val Asn Lys Glu Asn Ile
305                 310                 315                 320
Arg His Thr Glu Glu Arg Leu Leu Arg Tyr Leu Ile His Leu Arg Phe
                325                 330                 335
Gln Ser Ser Lys Ser Gly Lys Ile Tyr Leu His Arg Asp Val Arg Leu
            340                 345                 350
Leu Phe Ser Arg Lys Ser Met Glu Val Asp Ser Gly Ala Ala Tyr Glu
        355                 360                 365
Leu Lys Ser Tyr Thr Glu Ser Pro Thr Asn Pro Gln Phe Ser Pro Arg
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Cys
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (239)..(538)

<400> 12561

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<212> PRT
<213> Homo sapiens

<400> 12562

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			20					25					30		
Tyr	Ile	Leu	Gln	Gly	Asn	Ile	Ser	Gly	Thr	Asp	Asn	Trp	Leu	Lys	His
		35					40					45			
Trp	Tyr	Phe	Asn	Val	Thr	His	Phe	Tyr	Arg	Thr	Phe	Leu	Pro	Gly	Gly
	50					55					60				
Thr	Asp	Leu	Asp	Phe	Ser	Tyr	Lys	Asp	His	Thr	Ala	Phe	Val	Phe	Asn
65					70					75					80
Val	Met	Gln	Phe	Val	Tyr	Leu	Leu	Ile	Ile	Tyr	Leu	Gln	Phe	Leu	Ile
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<211> 1432

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0050305-030800

<212> DNA
<213> Homo sapiens

<220>
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tactcgggag gctgaggcag gagaatggtg tgaacctggg aggtggagct tgcagtgaac 1380
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<210> 12564
<211> 265
<212> PRT
<213> Homo sapiens

<400> 12564
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Pro Trp Met Gly Gly Gly Ser Thr His Phe Ala Lys Trp Gly Gln Asp
35 40 45
Thr His Asp Leu Leu Glu Val His Ser Leu Arg Leu Pro Gly Arg Glu
50 55 60

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Ser Arg Val Glu Glu Pro Leu Glu Asn Asp Ile Ser Gln Leu Val Asp
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Glu Val Val Cys Ala Leu Gln Pro Val Ile Gln Asp Lys Pro Phe Ala
                85                  90                  95
Phe Phe Gly His Ser Met Gly Ser Tyr Ile Ala Phe Arg Thr Ala Leu
            100                 105                 110
Gly Leu Lys Glu Asn Asn Gln Pro Glu Pro Leu His Leu Phe Leu Ser
        115                 120                 125
Ser Ala Thr Pro Val His Ser Lys Ala Trp His Arg Ile Pro Lys Asp
    130                 135                 140
Asp Glu Leu Ser Glu Glu Gln Ile Ser His Tyr Leu Met Glu Phe Gly
145                 150                 155                 160
Gly Thr Pro Lys His Phe Ala Glu Ala Lys Glu Phe Val Lys Gln Cys
                165                 170                 175
Ser Pro Ile Ile Arg Ala Asp Leu Asn Ile Val Arg Ser Cys Thr Ser
            180                 185                 190
Asn Val Pro Ser Lys Ala Val Leu Ser Cys Asp Leu Thr Cys Phe Val
        195                 200                 205
Gly Ser Glu Asp Ile Ala Lys Asp Met Glu Ala Trp Lys Asp Val Thr
    210                 215                 220
Ser Gly Asn Ala Lys Ile Tyr Gln Leu Pro Gly Gly His Phe Tyr Leu
225                 230                 235                 240
Leu Asp Pro Ala Asn Glu Lys Leu Ile Lys Asn Tyr Ile Ile Lys Cys
                245                 250                 255
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<211> 1573
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (776)..(1396)

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0602926-0602926

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<211> 207
<212> PRT
<213> Homo sapiens

<400> 12566

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			20					25					30		
Lys	Gly	Glu	Ala	Asn	Phe	Phe	Thr	Ser	Gln	Met	Ile	Lys	Asp	Cys	Met
		35					40					45			
Lys	Lys	Val	Val	Ala	Val	His	Leu	His	Gln	Thr	Val	Gln	Val	Arg	Phe
	50					55					60				
Pro	Gly	Pro	Gln	Leu	Ala	Gln	Ser	Leu	Pro	Thr	Pro	Thr	Pro	Thr	Met
65					70					75					80
Pro	Ser	Ala	Arg	Ser	Thr	Gln	Phe	Leu	Glu	Gly	Trp	Gly	Leu	Arg	Val
				85					90					95	
Ser	Pro	Pro	His	Leu	Thr	Leu	Ala	Ser	Ser	Thr	Val	Gly	Thr	Pro	Gly
			100					105					110		
Gly	Val	Ser	Ala	Arg	Met	Arg	Val	Pro	Asp	Gln	Thr	Gly	Arg	Arg	Pro
		115					120					125			
Gly	Arg	Ala	Arg	Ala	Gly	Trp	Gly	Tyr	Ala	Pro	Ala	Tyr	Glu	Pro	Thr
	130					135					140				
Arg	Leu	Cys	Pro	Ser	Gly	Ile	Glu	Met	Ala	Arg	Val	Gly	Gln	Ala	Gly
145					150					155					160
Ala	Leu	Arg	Ala	Leu	Gly	Ala	Ala	Arg	Asp	Ser	Leu	Glu	Leu	Pro	Gly
				165					170					175	
Cys	Cys	Arg	Ala	Gly	Arg	Gln	Gly	Leu	Glu	Gly	Arg	Trp	Ala	Ser	Ser

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<210> 12567
<211> 2098
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (17)..(1882)

<400> 12567
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tccccaagac tgccaccagt ctacacatac agcagccccc tggacagaat cagcatttca 1980

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<212> PRT
<213> Homo sapiens

<400> 12568

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Lys Leu Leu Gln Arg Arg Arg Lys Gly Ala Ala Glu Glu Glu Gln Glu
    50                  55                  60
Asp Ser Gly Ser Glu Pro Arg Gly Asp Glu Asp Asp Ile Pro Leu Gly
65                  70                  75                  80
Pro Gln Ser Asn Val Ser Leu Leu Asp Gln His Gln His Leu Lys Glu
                85                  90                  95
Lys Ala Glu Ala Arg Lys Glu Ser Ala Lys Glu Lys Gln Leu Lys Glu
            100                 105                 110
Glu Glu Lys Ile Leu Glu Ser Val Ala Glu Gly Arg Ala Leu Met Ser
        115                 120                 125
Val Lys Glu Met Ala Lys Gly Ile Thr Tyr Asp Asp Pro Ile Lys Thr
    130                 135                 140
Ser Trp Thr Pro Pro Arg Tyr Val Leu Ser Met Ser Glu Glu Arg His
145                 150                 155                 160
Glu Arg Val Arg Glu Lys Tyr His Ile Leu Val Glu Gly Asp Gly Ile
                165                 170                 175
Pro Pro Pro Ile Lys Ser Phe Lys Glu Met Lys Phe Pro Ala Ala Ile
            180                 185                 190
Leu Arg Gly Leu Lys Lys Lys Gly Ile His His Pro Thr Pro Ile Gln
        195                 200                 205
Ile Gln Gly Ile Pro Thr Ile Leu Ser Gly Arg Asp Met Ile Gly Ile
    210                 215                 220
Ala Phe Thr Gly Ser Gly Lys Thr Leu Val Phe Thr Leu Pro Val Ile
225                 230                 235                 240
Met Phe Cys Leu Glu Gln Glu Lys Arg Leu Pro Phe Ser Lys Arg Glu
                245                 250                 255
Gly Pro Tyr Gly Leu Ile Ile Cys Pro Ser Arg Glu Leu Ala Arg Gln
            260                 265                 270
Thr His Gly Ile Leu Glu Tyr Tyr Cys Arg Leu Leu Gln Glu Asp Ser
        275                 280                 285
Ser Pro Leu Leu Arg Cys Ala Leu Cys Ile Gly Gly Met Ser Val Lys
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0050490-0050800

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Pro Gly Arg Leu Met Asp Leu Leu Gln Lys Lys Met Val Ser Leu Asp
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Ile Cys Arg Tyr Leu Ala Leu Asp Glu Ala Asp Arg Met Ile Asp Met
            340                 345                 350
Gly Phe Glu Gly Asp Ile Arg Thr Ile Phe Ser Tyr Phe Lys Gly Gln
        355                 360                 365
Arg Gln Thr Leu Leu Phe Ser Ala Thr Met Pro Lys Lys Ile Gln Asn
    370                 375                 380
Phe Ala Lys Ser Ala Leu Val Lys Pro Val Thr Ile Asn Val Gly Arg
385                 390                 395                 400
Ala Gly Ala Ala Ser Leu Asp Val Ile Gln Glu Val Glu Tyr Val Lys
                405                 410                 415
Glu Glu Ala Lys Met Val Tyr Leu Leu Glu Cys Leu Gln Lys Thr Pro
            420                 425                 430
Pro Pro Val Leu Ile Phe Ala Glu Lys Lys Ala Asp Val Asp Ala Ile
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His Glu Tyr Leu Leu Leu Lys Gly Val Glu Ala Val Ala Ile His Gly
    450                 455                 460
Gly Lys Asp Gln Glu Glu Arg Thr Lys Ala Ile Glu Ala Phe Arg Glu
465                 470                 475                 480
Gly Lys Lys Asp Val Leu Val Ala Thr Asp Val Ala Ser Lys Gly Leu
                485                 490                 495
Asp Phe Pro Ala Ile Gln His Val Ile Asn Tyr Asp Met Pro Glu Glu
            500                 505                 510
Ile Glu Asn Tyr Val His Arg Ile Gly Arg Thr Gly Arg Ser Gly Asn
        515                 520                 525
Thr Gly Ile Ala Thr Thr Phe Ile Asn Lys Ala Cys Asp Glu Ser Val
    530                 535                 540
Leu Met Asp Leu Lys Ala Leu Gln Leu Glu Ala Lys Gln Lys Val Pro
545                 550                 555                 560
Pro Val Leu Gln Val Leu His Cys Gly Asp Glu Ser Met Leu Asp Ile
                565                 570                 575
Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly Gly Leu Gly His Arg Ile
            580                 585                 590
Thr Asp Cys Pro Lys Leu Glu Ala Met Gln Thr Lys Gln Val Ser Asn
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Ile Gly Arg Lys Asp Tyr Leu Ala His Ser Ser Met Asp Phe
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<212> DNA
<213> Homo sapiens

<220>

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<221> CDS
<222> (17)..(1852)

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gaaacgacta atagcagaag gtaataaaga agaactacga aaatgttttg gggcccgaat 180
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cttgaccatc atccagacta cacagggatt ttgcagatac ctggaaaaac aattcagtga 300
cttaaagcag aaaggcatcg tgatcagttt tgacgcccga gctcatccat ccagtggggg 360
tagcagcaga aggtttgccc gacttgctgc aaccacattt atcagtcagg ggattcctgt 420
gtacctcttt tctgatataa cgccaacccc ctttgtgccc ttcacagtat cacatttgaa 480
actttgtgct ggaatcatgg taactgcatc tcacaatcca aagcaggata atggttataa 540
ggtctattgg gataatggag ctcagatcat ttctcctcac gataaaggga tttctcaagc 600
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tccacttctc cacaatccga gtgcttccat caataatgac tactttgaag accttaaaaa 720
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tcccgaagag gggaaaggtg tcttgacttt gtcttttgct ttggctgaca aaaccaaggc 960
cagaattgtt ttagctaacg acccggatgc tgatagactt gctgtggcag aaaagcaaga 1020
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cctatggagt tagtaaattc tgggctgtca tatgtaggat agccactttt taggtatatg 2280
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<210> 12570
<211> 612
<212> PRT

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<213> Homo sapiens

<400> 12570

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             20                  25                  30
Glu Ala Val Lys Arg Leu Ile Ala Glu Gly Asn Lys Glu Glu Leu Arg
         35                  40                  45
Lys Cys Phe Gly Ala Arg Met Glu Phe Gly Thr Ala Gly Leu Arg Ala
     50                  55                  60
Ala Met Gly Pro Gly Ile Ser Arg Met Asn Asp Leu Thr Ile Ile Gln
 65                  70                  75                  80
Thr Thr Gln Gly Phe Cys Arg Tyr Leu Glu Lys Gln Phe Ser Asp Leu
                 85                  90                  95
Lys Gln Lys Gly Ile Val Ile Ser Phe Asp Ala Arg Ala His Pro Ser
            100                 105                 110
Ser Gly Gly Ser Ser Arg Arg Phe Ala Arg Leu Ala Ala Thr Thr Phe
        115                 120                 125
Ile Ser Gln Gly Ile Pro Val Tyr Leu Phe Ser Asp Ile Thr Pro Thr
    130                 135                 140
Pro Phe Val Pro Phe Thr Val Ser His Leu Lys Leu Cys Ala Gly Ile
145                 150                 155                 160
Met Val Thr Ala Ser His Asn Pro Lys Gln Asp Asn Gly Tyr Lys Val
                165                 170                 175
Tyr Trp Asp Asn Gly Ala Gln Ile Ile Ser Pro His Asp Lys Gly Ile
            180                 185                 190
Ser Gln Ala Ile Glu Glu Asn Leu Glu Pro Trp Pro Gln Ala Trp Asp
        195                 200                 205
Asp Ser Leu Ile Asp Ser Ser Pro Leu Leu His Asn Pro Ser Ala Ser
    210                 215                 220
Ile Asn Asn Asp Tyr Phe Glu Asp Leu Lys Lys Tyr Cys Phe His Arg
225                 230                 235                 240
Ser Val Asn Arg Glu Thr Lys Val Lys Phe Val His Thr Ser Val His
                245                 250                 255
Gly Val Gly His Ser Phe Val Gln Ser Ala Phe Lys Ala Phe Asp Leu
            260                 265                 270
Val Pro Pro Glu Ala Val Pro Glu Gln Lys Asp Pro Asp Pro Glu Phe
        275                 280                 285
Pro Thr Val Lys Tyr Pro Asn Pro Glu Glu Gly Lys Gly Val Leu Thr
    290                 295                 300
Leu Ser Phe Ala Leu Ala Asp Lys Thr Lys Ala Arg Ile Val Leu Ala
305                 310                 315                 320
Asn Asp Pro Asp Ala Asp Arg Leu Ala Val Ala Glu Lys Gln Asp Ser
                325                 330                 335
Gly Glu Trp Arg Val Phe Ser Gly Asn Glu Leu Gly Ala Leu Leu Gly
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Trp Trp Leu Phe Thr Ser Trp Lys Glu Lys Asn Gln Asp Arg Ser Ala
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385                 390                 395                 400
Gly Phe Lys Trp Met Gly Asn Arg Ala Lys Gln Leu Ile Asp Gln Gly
                405                 410                 415
Lys Thr Val Leu Phe Ala Phe Glu Glu Ala Ile Gly Tyr Met Cys Cys
            420                 425                 430
Pro Phe Val Leu Asp Lys Asp Gly Val Ser Ala Ala Val Ile Ser Ala
        435                 440                 445
Glu Leu Ala Ser Phe Leu Ala Thr Lys Asn Leu Ser Leu Ser Gln Gln
    450                 455                 460
Leu Lys Ala Ile Tyr Val Glu Tyr Gly Tyr His Ile Thr Lys Ala Ser
465                 470                 475                 480
Tyr Phe Ile Cys His Asp Gln Glu Thr Ile Lys Lys Leu Phe Glu Asn
                485                 490                 495
Leu Arg Asn Tyr Asp Gly Lys Asn Asn Tyr Pro Lys Ala Cys Gly Lys
            500                 505                 510
Phe Glu Ile Ser Ala Ile Arg Asp Leu Thr Thr Gly Tyr Asp Asp Ser
        515                 520                 525
Gln Pro Asp Lys Lys Ala Val Leu Pro Thr Ser Lys Ser Ser Gln Met
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Ile Thr Phe Thr Phe Ala Asn Gly Gly Val Ala Thr Met Arg Thr Ser
545                 550                 555                 560
Gly Thr Glu Pro Lys Ile Lys Tyr Tyr Ala Glu Leu Cys Ala Pro Pro
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Gly Asn Ser Asp Pro Glu Gln Leu Lys Lys Glu Leu Asn Glu Leu Val
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<212> DNA
<213> Homo sapiens

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tccattagcc agacatgttt acttttatat tagaagtttg ttgattaggt cttaattttc 240
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aatatttaat ttgaagttaa ttattgttaa tccttctaga aaagtttttt ttctttaaat 360
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gctgccctga cctgacatgt catgatgtcg acttgctagg tggggttcgc tggggacgat 600
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<212> DNA
<213> Homo sapiens

<220>
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<212> PRT
<213> Homo sapiens

<400> 12573

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			20					25					30		
Gly	Ser	Ser	Gly	Leu	Phe	Asn	Asp	His	Gly	Leu	Gln	Val	Gln	Gln	Gln
		35					40					45			
Gln	Gln	Arg	Asn	Leu	Ser	Leu	His	Glu	Tyr	Met	Ser	Met	Glu	Leu	Leu
	50					55					60				

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Asp Glu Ala Tyr Ala Ile Ala Lys Lys Leu Gly Ser Lys Asp Val Val
                85                  90                  95
Ile Lys Ala Gln Val Leu Ala Gly Gly Arg Gly Lys Gly Thr Phe Glu
            100                 105                 110
Ser Gly Leu Lys Gly Gly Val Lys Ile Val Phe Ser Pro Glu Glu Ala
        115                 120                 125
Lys Ala Val Ser Ser Gln Met Ile Gly Lys Lys Leu Phe Thr Lys Gln
    130                 135                 140
Thr Gly Glu Lys Gly Arg Ile Cys Asn Gln Val Leu Val Cys Glu Arg
145                 150                 155                 160
Lys Tyr Pro Arg Arg Glu Tyr Tyr Phe Ala Ile Thr Met Glu Arg Ser
                165                 170                 175
Phe Gln Gly Pro Val Leu Ile Gly Ser Ser His Gly Gly Val Asn Ile
            180                 185                 190
Glu Asp Val Ala Ala Glu Thr Pro Glu Ala Val Ile Lys Glu Pro Ile
        195                 200                 205
Asp Ile Glu Glu Gly Ile Lys Lys Glu Gln Ala Leu Gln Leu Ala Gln
    210                 215                 220
Lys Met Gly Phe Pro Pro Asn Ile Val Glu Ser Ala Ala Glu Asn Met
225                 230                 235                 240
Val Lys Leu Tyr Ser Leu Phe Leu Lys Tyr Asp Ala Thr Met Ile Glu
                245                 250                 255
Ile Asn Pro Met Val Glu Asp Ser Asp Gly Ala Val Leu Cys Met Asp
            260                 265                 270
Ala Lys Ile Asn Phe Asp Ser Asn Ser Ala Tyr Arg Gln Lys Lys Ile
        275                 280                 285
Phe Asp Leu Gln Asp Trp Thr Gln Glu Asp Glu Arg Asp Lys Asp Ala
    290                 295                 300
Ala Lys Ala Asn Leu Asn Tyr Ile Gly Leu Asp Gly Asn Ile Gly Cys
305                 310                 315                 320
Leu Val Asn Gly Ala Gly Leu Ala Met Ala Thr Met Asp Ile Ile Lys
                325                 330                 335
Leu His Gly Gly Thr Pro Ala Asn Phe Leu Asp Val Gly Gly Gly Ala
            340                 345                 350
Thr Val His Gln Val Thr Glu Ala Phe Lys Leu Ile Thr Ser Asp Lys
        355                 360                 365
Lys Val Leu Ala Ile Leu Val Asn Ile Phe Gly Gly Ile Met Arg Cys
    370                 375                 380
Asp Val Ile Ala Gln Gly Ile Val Met Ala Val Lys Asp Leu Glu Ile
385                 390                 395                 400
Lys Ile Pro Val Val Val Arg Leu Gln Gly Thr Arg Val Asp Asp Ala
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Lys Ala Leu Ile Ala Asp Ser Gly Leu Lys Ile Leu Ala Cys Asp Asp
            420                 425                 430
Leu Asp Glu Ala Ala Arg Met Val Val Lys Leu Ser Glu Ile Val Thr
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Leu Ala Lys Gln Ala His Val Asp Val Lys Phe Gln Leu Pro Ile
450 455 460

<210> 12574
<211> 1044
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (140)..(895)

<400> 12574
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tggaacgtct tcttgtcaca tggggatcag caaagacccg atttttgtac caggcgtctg 180
ggggccttat ttctcagcca tggtacctgg gttctggctg aatgaaggtg gtcagagcgt 240
tactggaaaa ttgatagacc acatggtaca aggccatgct gcttttccag aactacaagt 300
aaaggccaca gccagatgcc agagtatata tgcatatttg aacagtcacc tggatctgat 360
taagaaggct cagcctgtgg gtttccttac tgttgattta catgtttggc cagatttcca 420
tggcaaccgg tctcccttag cagatctgac actaaagggc atggtcaccg gattgaaact 480
gtctcaggac cttgatgatc ttgccattct ctacctggcc acagttcaag ccattgcttt 540
ggggactcgc ttcattatag aagccatgga ggcagcaggg cactcaatca gtactctttt 600
cctatgtgga ggcctcagca agaatcccct ttttgtgcaa atgcatgcgg acattactgg 660
catgcctgtg gtcctgtcgc aagaggtgga gtccgttctt gtgggtgctg ctgttctggg 720
tgcctgtgcc tcaggggatt tcgcttctgt acaggaagca atggcaaaaa tgagcaaagt 780
cgggaaagtt gtgttcccga gactacagga taaaaaatac tatgataaga aataccaagt 840
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aagaaaacaa acatgtgcaa ccag 1044

<210> 12575
<211> 252
<212> PRT
<213> Homo sapiens

<400> 12575
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Tyr Phe Ser Ala Met Val Pro Gly Phe Trp Leu Asn Glu Gly Gly Gln
20 25 30
Ser Val Thr Gly Lys Leu Ile Asp His Met Val Gln Gly His Ala Ala
35 40 45
Phe Pro Glu Leu Gln Val Lys Ala Thr Ala Arg Cys Gln Ser Ile Tyr
50 55 60

0960456-0052800

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Ala Tyr Leu Asn Ser His Leu Asp Leu Ile Lys Lys Ala Gln Pro Val
 65                  70                  75                  80
Gly Phe Leu Thr Val Asp Leu His Val Trp Pro Asp Phe His Gly Asn
                85                  90                  95
Arg Ser Pro Leu Ala Asp Leu Thr Leu Lys Gly Met Val Thr Gly Leu
            100                 105                 110
Lys Leu Ser Gln Asp Leu Asp Asp Leu Ala Ile Leu Tyr Leu Ala Thr
        115                 120                 125
Val Gln Ala Ile Ala Leu Gly Thr Arg Phe Ile Ile Glu Ala Met Glu
    130                 135                 140
Ala Ala Gly His Ser Ile Ser Thr Leu Phe Leu Cys Gly Gly Leu Ser
145                 150                 155                 160
Lys Asn Pro Leu Phe Val Gln Met His Ala Asp Ile Thr Gly Met Pro
                165                 170                 175
Val Val Leu Ser Gln Glu Val Glu Ser Val Leu Val Gly Ala Ala Val
            180                 185                 190
Leu Gly Ala Cys Ala Ser Gly Asp Phe Ala Ser Val Gln Glu Ala Met
        195                 200                 205
Ala Lys Met Ser Lys Val Gly Lys Val Val Phe Pro Arg Leu Gln Asp
    210                 215                 220
Lys Lys Tyr Tyr Asp Lys Lys Tyr Gln Val Phe Leu Lys Leu Val Glu
225                 230                 235                 240
His Gln Lys Glu Tyr Leu Ala Ile Met Asn Asp Asp
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<210> 12576
<211> 2122
<212> DNA
<213> Homo sapiens

<220>
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<222> (299)..(1210)

<400> 12576
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caaacagcct tatcaggtgt tcacagtgga gcactccgta agtgtagaca aagagcccat 300
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aataccacta aagtcaaagg ccatcagctg ctgcaggaat gttactgaag acaaactgat 420
tctgggctgt gaagattctt cgctaattct ttatgaaact caccgtagag tgactctctt 480
agcacagact gaacttttgc cttcattaat aagctgccac ccaagtggtg ccattctgct 540
agttggcagc aaccaagggg agttgcaaat ttttgatatg gctctatccc ctattaacat 600
ccaactgttg gctgaagacc gcttacccag ggagactctg caattcagta aattatttga 660
tgcctccagc agtcttgttc aaatgcaatg gatagctcct caggttgttt ctcagaaggg 720

0050456-0050800

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ctggattttt gatgactaat acctgtaatg cagaagacgg agaactgaga gaagacggca 1440
gagaacagga aatcagagat ggtggttctc tcaaaatgat tcactttggt ctggtgtaaa 1500
cattaagaaa aaaagaaaac tgccttcttc atatctaaac ttttcatggc ctgatacaga 1560
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<210> 12577
<211> 304
<212> PRT
<213> Homo sapiens

<400> 12577

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			20					25					30		
Arg	Asn	Val	Thr	Glu	Asp	Lys	Leu	Ile	Leu	Gly	Cys	Glu	Asp	Ser	Ser
		35					40					45			
Leu	Ile	Leu	Tyr	Glu	Thr	His	Arg	Arg	Val	Thr	Leu	Leu	Ala	Gln	Thr
	50					55					60				
Glu	Leu	Leu	Pro	Ser	Leu	Ile	Ser	Cys	His	Pro	Ser	Gly	Ala	Ile	Leu
65					70					75					80
Leu	Val	Gly	Ser	Asn	Gln	Gly	Glu	Leu	Gln	Ile	Phe	Asp	Met	Ala	Leu
				85					90					95	
Ser	Pro	Ile	Asn	Ile	Gln	Leu	Leu	Ala	Glu	Asp	Arg	Leu	Pro	Arg	Glu
			100					105					110		
Thr	Leu	Gln	Phe	Ser	Lys	Leu	Phe	Asp	Ala	Ser	Ser	Ser	Leu	Val	Gln
		115					120					125			

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Met Gln Trp Ile Ala Pro Gln Val Val Ser Gln Lys Gly Glu Gly Ser
    130                 135                 140
Asp Ile Tyr Asp Leu Leu Phe Leu Arg Phe Glu Arg Gly Pro Leu Gly
145                 150                 155                 160
Val Leu Leu Phe Lys Leu Gly Val Phe Thr Arg Gly Gln Leu Gly Leu
                165                 170                 175
Ile Asp Ile Ile Phe Gln Tyr Ile His Cys Asp Glu Ile Tyr Glu Ala
            180                 185                 190
Ile Asn Ile Leu Ser Ser Met Asn Trp Asp Thr Leu Gly His Gln Cys
        195                 200                 205
Phe Ile Ser Met Ser Ala Ile Val Asn His Leu Leu Arg Gln Lys Leu
    210                 215                 220
Thr Pro Glu Arg Glu Ala Gln Leu Glu Thr Ser Leu Gly Thr Phe Tyr
225                 230                 235                 240
Ala Pro Thr Arg Pro Leu Leu Asp Ser Thr Ile Leu Glu Tyr Arg Asp
                245                 250                 255
Gln Ile Ser Lys Tyr Ala Arg Arg Phe Phe His His Leu Leu Arg Tyr
            260                 265                 270
Gln Arg Phe Glu Lys Ala Phe Leu Leu Ala Val Asp Val Gly Ala Arg
        275                 280                 285
Asp Leu Phe Met Asn Ser Trp Asp Leu Gly Gln Arg Gly Tyr Ala Lys
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0605450-0605800

<210> 12578
<211> 1729
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (71)..(664)

<400> 12578
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ttccaaaaac ctggccgttc aggcacaaaa gaagatcttg ggtaaaatgg tgtccaaatc 180
catcgccacc accttaatag acgacacaag tagtgaggtg ctggatgagc tctacagagt 240
gaccagggag tacacccaaa acaagaagga ggcagagaag atcatcaaga acctcatcaa 300
gacagtcatc aagctggcca ttctttatag gaataatcag tttaatcaag atgagctagc 360
attgatggag aaatttaaga agaaagttca tcagcttgct atgaccgtgg tcagtttcca 420
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gatgctgcac caaatcattc agcgccacct cactgccaag tcacatggac gggttaataa 540
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ttttaaaccc cacttacaaa aactatgtga tggtatcaac aaaatgttgg atgaagagaa 660
catatgagca catgagttaa gattgtgact gatcatgatt tatttgaaga tggagcactg 720
ctgatttatg aaggaaaaaa gaagaatttt ctaaagatta cacatatttc agaaagactt 780
tacccaattc agttgtcaga cataatgatt tatttgaagg cttgttttat ttgaagaaaa 840
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<210> 12579
<211> 198
<212> PRT
<213> Homo sapiens

<400> 12579

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Asn	Ser	Lys	Asn	Leu	Ala	Val	Gln	Ala	Gln	Lys	Lys	Ile	Leu	Gly	Lys
			20					25					30		
Met	Val	Ser	Lys	Ser	Ile	Ala	Thr	Thr	Leu	Ile	Asp	Asp	Thr	Ser	Ser
		35					40					45			
Glu	Val	Leu	Asp	Glu	Leu	Tyr	Arg	Val	Thr	Arg	Glu	Tyr	Thr	Gln	Asn
	50					55					60				
Lys	Lys	Glu	Ala	Glu	Lys	Ile	Ile	Lys	Asn	Leu	Ile	Lys	Thr	Val	Ile
65					70					75					80
Lys	Leu	Ala	Ile	Leu	Tyr	Arg	Asn	Asn	Gln	Phe	Asn	Gln	Asp	Glu	Leu
				85					90					95	
Ala	Leu	Met	Glu	Lys	Phe	Lys	Lys	Lys	Val	His	Gln	Leu	Ala	Met	Thr
			100					105					110		
Val	Val	Ser	Phe	His	Gln	Val	Asp	Tyr	Thr	Phe	Asp	Arg	Asn	Val	Leu
		115					120					125			
Ser	Arg	Leu	Leu	Asn	Glu	Cys	Arg	Glu	Met	Leu	His	Gln	Ile	Ile	Gln
	130					135					140				
Arg	His	Leu	Thr	Ala	Lys	Ser	His	Gly	Arg	Val	Asn	Asn	Val	Phe	Asp
145					150					155					160
His	Phe	Ser	Asp	Cys	Glu	Phe	Leu	Ala	Ala	Leu	Tyr	Asn	Pro	Phe	Gly
				165					170					175	
Asn	Phe	Lys	Pro	His	Leu	Gln	Lys	Leu	Cys	Asp	Gly	Ile	Asn	Lys	Met
			180					185					190		
Leu	Asp	Glu	Glu	Asn	Ile										

09/15/2005 - 09:53 #3800

<210> 12580
<211> 1911
<212> DNA
<213> Homo sapiens

<400> 12580
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agacaaccac agaaagtttt gtttttgtca cattctactg ctactgtgtc aatggcagca 180
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<210> 12581
<211> 2043
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (99)..(1682)

<400> 12581
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tct 2043

<210> 12582
<211> 528
<212> PRT
<213> Homo sapiens

<400> 12582

EP1530600

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            20                  25                  30
Lys Thr Lys Phe Leu Asn Ala Tyr Ile Thr Val Ser Glu Glu Val Ala
        35                  40                  45
Leu Lys Gln Ala Glu Glu Ser Glu Lys Arg Tyr Lys Asn Gly Gln Ser
    50                  55                  60
Leu Gly Asp Leu Asp Gly Ile Pro Ile Ala Val Lys Asp Asn Phe Ser
65                  70                  75                  80
Thr Ser Gly Ile Glu Thr Thr Cys Ala Ser Asn Met Leu Lys Gly Tyr
                85                  90                  95
Ile Pro Pro Tyr Asn Ala Thr Val Val Gln Lys Leu Leu Asp Gln Gly
            100                 105                 110
Ala Leu Leu Met Gly Lys Thr Asn Leu Asp Glu Phe Ala Met Gly Ser
        115                 120                 125
Gly Ser Thr Asp Gly Val Phe Gly Pro Val Lys Asn Pro Trp Ser Tyr
    130                 135                 140
Ser Lys Gln Tyr Arg Glu Lys Arg Lys Gln Asn Pro His Ser Glu Asn
145                 150                 155                 160
Glu Asp Ser Asp Trp Leu Ile Thr Gly Gly Ser Ser Gly Gly Ser Ala
                165                 170                 175
Ala Ala Val Ser Ala Phe Thr Cys Tyr Ala Ala Leu Gly Ser Asp Thr
            180                 185                 190
Gly Gly Ser Thr Arg Asn Pro Ala Ala His Cys Gly Leu Val Gly Phe
        195                 200                 205
Lys Pro Ser Tyr Gly Leu Val Ser Arg His Gly Leu Ile Pro Leu Val
    210                 215                 220
Asn Ser Met Asp Val Pro Gly Ile Leu Thr Arg Cys Val Asp Asp Ala
225                 230                 235                 240
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Thr Val His Glu Pro Ile Asn Lys Pro Phe Met Leu Pro Ser Leu Ala
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Asp Val Ser Lys Leu Cys Ile Gly Ile Pro Lys Glu Tyr Leu Val Pro
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Glu Leu Ser Ser Glu Val Gln Ser Leu Trp Ser Lys Ala Ala Asp Leu
    290                 295                 300
Phe Glu Ser Glu Gly Ala Lys Val Ile Glu Val Ser Leu Pro His Thr
305                 310                 315                 320
Ser Tyr Ser Ile Val Cys Tyr His Val Leu Cys Thr Ser Glu Val Ala
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Ser Asn Met Ala Arg Phe Asp Gly Leu Gln Tyr Gly His Arg Cys Asp
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Ile Asp Val Ser Thr Glu Ala Met Tyr Ala Ala Thr Arg Arg Glu Gly
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Val Leu Leu Thr Pro Thr Thr Leu Ser Glu Ala Val Pro Tyr Leu Glu
            420                 425                 430
Phe Ile Lys Glu Asp Asn Arg Thr Arg Ser Ala Gln Asp Asp Ile Phe
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Thr Gln Ala Val Asn Met Ala Gly Leu Pro Ala Val Ser Ile Pro Val
    450                 455                 460
Ala Leu Ser Asn Gln Gly Leu Pro Ile Gly Leu Gln Phe Ile Gly Arg
465                 470                 475                 480
Ala Phe Cys Asp Gln Gln Leu Leu Thr Val Ala Lys Trp Phe Glu Lys
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Gln Val Gln Phe Pro Val Ile Gln Leu Gln Glu Leu Met Asp Asp Cys
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<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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Leu	Gly	Thr	Asp	Gln	Val	Ser	Glu	Leu	Val	Pro	Gly	Lys	Glu	Glu	Leu
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Asn	Ile	Val	Lys	Leu	Tyr	Ala	His	Lys	Gly	Asp	Ala	Val	Thr	Val	Tyr
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Pro	Thr	Val	Tyr	Thr	Leu	Trp	Ser	Tyr	Pro	Asp	Leu	Leu	Pro	Thr	Phe
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Thr	Thr	Trp	Pro	Leu	Val	Leu	Glu	Lys	Leu	Val	Gly	Gly	Ala	Asp	Leu
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                245                 250                 255
Ser Lys Thr Leu Gln Glu Gln Met Asp Glu Leu Leu Gln Gln Cys Phe
            260                 265                 270
Leu His Ala Leu Lys Cys Arg Val Lys Lys Ala Asp Leu Pro Leu Leu
        275                 280                 285
Thr Ser Thr Phe Leu Gly Ser His Met Phe Ser Cys Cys Pro Glu Gly
    290                 295                 300
Arg Gln Leu Asp Ile Lys Lys Ser Ser Tyr Lys Lys Leu Ser Lys Phe
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Lys Gly Val Glu Ser Ile Val Ala Val Asp Trp Lys His Pro Arg Ile
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    450                 455                 460
Leu Glu Lys Leu Gln Pro Ala Tyr Gln Val Thr Leu Pro Gly Gln Glu
465                 470                 475                 480
Pro Ile Val Lys Lys Gly Arg Ile Cys Pro Ile Asp Ile Thr Leu Ala
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Gln Arg Ala Ser Asn Lys Lys Val Thr Val Val Arg Asn Leu Glu Ala
            500                 505                 510
Tyr Gly Leu Asp Pro Tyr Ser Val Ala Ala Ile Leu Gln Gln Arg Cys
        515                 520                 525
Gln Ala Ser Thr Thr Val Asn Pro Ala Pro Gly Ala Lys Asp Ser Leu
    530                 535                 540
Gln Val Gln Ile Gln Gly Asn Gln Val His His Leu Gly Trp Leu Leu
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<212> DNA
<213> Homo sapiens

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35 40 45
Gly Pro Arg Gly Arg Arg Arg Lys His Gly Glu Gly Pro Glu Arg Arg
50 55 60
Gly Thr Arg Glu Ala Tyr Val Gly Lys Arg Ser Pro Leu Pro Leu Cys
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<400> 12588

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<212> PRT
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35 40 45
Ser Ala His Pro Leu Arg Leu Cys Leu Leu His Arg Leu Val Cys Phe
50 55 60
Ser Gly Gly Leu Thr Ser Ile Gln Leu Ser Pro Arg Thr Cys Cys Ser
65 70 75 80
His Gln Trp Ala Gln Leu Phe Ser Pro Ala Cys Phe Pro Gln Trp Arg
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<210> 12591
<211> 1827
<212> DNA
<213> Homo sapiens

<400> 12591
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09/02/2004 10:56:56 PM

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<210> 12592
<211> 1862
<212> DNA
<213> Homo sapiens

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<210> 12593
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (136)..(855)

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<210> 12594
<211> 240
<212> PRT
<213> Homo sapiens

<400> 12594

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			20					25					30		
Glu	Arg	Ala	Pro	Arg	Gly	Asp	Glu	Lys	Thr	Leu	Ser	Ser	Gly	Glu	Pro
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Pro	Gly	Thr	Leu	Thr	Ser	Ala	Met	Thr	His	Asp	Glu	Asp	Leu	Asp	Arg
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Val	Pro	Ser	Arg	Ala	Glu	Leu	Ile	Gln	Tyr	Gln	Lys	Arg	Phe	Ile	Glu
			100					105					110		
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			180					185					190		
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<211> 2152
<212> DNA
<213> Homo sapiens

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<220>
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<210> 12596
<211> 299
<212> PRT
<213> Homo sapiens

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<400> 12596

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Ile Asn Cys Ser Ser Ser Ser Ile Ser Phe Glu Asn Gly Asn Ser Asp
         35                  40                  45
Ser Lys Asp Leu Glu Val Glu Thr Leu Thr Ala Ser Ser Glu Gly Asn
     50                  55                  60
Lys Glu Val Ile Pro Glu His Val Ala Glu Phe Ile Glu Ile Pro Ile
 65                  70                  75                  80
Ser Val Pro Glu Asp Val Ile Glu Asn Val Ile Glu Asn Gly Ser Pro
                 85                  90                  95
Asn Asn Ser Leu Asn Asn Val Phe Lys Pro Leu Thr Glu Cys Gly Asp
            100                 105                 110
Asp Tyr Glu Glu Glu Glu Asp Glu Glu Gly Asp Tyr Glu Glu Asp Asp
        115                 120                 125
Tyr Asp Leu Asn Gln Glu Thr Ser Val Ile His Lys Ile Asn Gly Thr
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Val Cys His Pro Lys Asp Ile Tyr Ala Thr Asp Gln Glu Gly Asn Phe
145                 150                 155                 160
Lys Cys Pro Ala Leu Gly Cys Val Arg Ile Phe Lys Arg Ile Gly Phe
                165                 170                 175
Leu Asn Lys His Ala Met Thr Val His Pro Thr Asp Leu Asn Val Arg
            180                 185                 190
Gln Thr Val Met Lys Trp Ser Lys Gly Lys Cys Lys Phe Cys Gln Arg
        195                 200                 205
Gln Phe Glu Asp Ser Gln His Phe Ile Asp Gln Leu Asn Arg His Ser
    210                 215                 220
Tyr Pro Asn Val Tyr Phe Cys Leu His Phe Asn Cys Asn Glu Ser Phe
225                 230                 235                 240
Lys Leu Pro Phe Gln Leu Ala Gln His Thr Lys Ser His Arg Thr Phe
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Gln Ala Gln Cys Ser Phe Pro Glu Cys His Glu Leu Phe Glu Asp Leu
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<212> DNA
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<221> CDS
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<211> 538
<212> PRT
<213> Homo sapiens

<400> 12598
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Gly Asn Phe Asp Leu Leu Leu Cys Val Gly Asn Phe Phe Gly Ser Thr

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Phe Gln Asp Ala Asp Gly Cys Glu Leu Ala Glu Asn Ile Thr Tyr Leu
                 85                  90                  95
Gly Arg Lys Gly Ile Phe Thr Gly Ser Ser Gly Leu Gln Ile Val Tyr
            100                 105                 110
Leu Ser Gly Thr Glu Ser Leu Asn Glu Pro Val Pro Gly Tyr Ser Phe
        115                 120                 125
Ser Pro Lys Asp Val Ser Ser Leu Arg Met Met Leu Cys Thr Thr Ser
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Gln Phe Lys Gly Val Asp Ile Leu Leu Thr Ser Pro Trp Pro Lys Cys
145                 150                 155                 160
Val Gly Asn Phe Gly Asn Ser Ser Gly Glu Val Asp Thr Lys Lys Cys
                165                 170                 175
Gly Ser Ala Leu Val Ser Ser Leu Ala Thr Gly Leu Lys Pro Arg Tyr
            180                 185                 190
His Phe Ala Ala Leu Glu Lys Thr Tyr Tyr Glu Arg Leu Pro Tyr Arg
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Asn His Ile Ile Leu Gln Glu Asn Ala Gln His Ala Thr Arg Phe Ile
    210                 215                 220
Ala Leu Ala Asn Val Gly Asn Pro Glu Lys Lys Lys Tyr Leu Tyr Ala
225                 230                 235                 240
Phe Ser Ile Val Pro Met Lys Leu Met Asp Ala Ala Glu Leu Val Lys
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Gln Pro Pro Asp Val Thr Glu Asn Pro Tyr Arg Lys Ser Gly Gln Glu
            260                 265                 270
Ala Ser Ile Gly Lys Gln Ile Leu Ala Pro Val Glu Glu Ser Ala Cys
        275                 280                 285
Gln Phe Phe Phe Asp Leu Asn Glu Lys Gln Gly Arg Lys Arg Ser Ser
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Thr Gly Arg Asp Ser Lys Ser Ser Pro His Pro Lys Gln Pro Arg Lys
305                 310                 315                 320
Pro Pro Gln Pro Pro Gly Pro Cys Trp Phe Cys Leu Ala Ser Pro Glu
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Val Glu Lys His Leu Val Val Asn Ile Gly Thr His Cys Tyr Leu Ala
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Leu Ala Lys Gly Gly Leu Ser Asp Asp His Val Leu Ile Leu Pro Ile
        355                 360                 365
Gly His Tyr Gln Ser Val Val Glu Leu Ser Ala Glu Val Val Glu Glu
    370                 375                 380
Val Glu Lys Tyr Lys Ala Thr Leu Arg Arg Phe Phe Lys Ser Arg Gly
385                 390                 395                 400
Lys Trp Cys Val Val Phe Glu Arg Asn Tyr Lys Ser His His Leu Gln
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Leu Gln Val Ile Pro Val Pro Ile Ser Cys Ser Thr Thr Asp Asp Ile
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Glu Ile Pro Glu His Ser Asp Ile Lys Gln Ile Ala Gln Pro Gly Ala
    450                 455                 460
Ala Tyr Phe Tyr Val Glu Leu Asp Thr Gly Glu Lys Leu Phe His Arg
465                 470                 475                 480
Ile Lys Lys Asn Phe Pro Leu Gln Phe Gly Arg Glu Val Leu Ala Ser
                485                 490                 495
Glu Ala Ile Leu Asn Val Pro Asp Lys Ser Asp Trp Arg Gln Cys Gln
            500                 505                 510
Ile Ser Lys Glu Asp Glu Glu Thr Leu Ala Arg Arg Phe Arg Lys Asp
        515                 520                 525
Phe Glu Pro Tyr Asp Phe Thr Leu Asp Asp
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<210> 12599
<211> 1139
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (418)..(1026)

<400> 12599

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tccccggggt gtaataatgt taactgagtt atattgggag ctagtttcaa gatgaaatac 180
taattctaag ccagtctatc catatgggga tggggaagcc ttggcattgt ccttttttctg 240
ataacctttg gacccttttgt aatattttat ttgacatttt atatcctctg ctttgtgggt 300
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<210> 12600
<211> 203
<212> PRT
<213> Homo sapiens

<400> 12600
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Arg Asp Tyr Val Gln Tyr Trp Tyr Tyr Thr Leu Ser Asp Asp Glu Ser
35 40 45
Phe Leu Leu Glu Ile Arg Gln Thr Leu Gln Asn Ala Leu Ile Gln Phe
50 55 60
Ala Thr Arg Ser Lys Glu Ile Asp Trp Gln Pro Tyr Phe Thr Thr Arg
65 70 75 80
Ile Val Asp Asp Phe Gly Thr His Leu Arg Val Phe Arg Lys Ala Gln
85 90 95
Gln Lys Ile Thr Glu Lys Asp Asp Gln Val Lys Gly Thr Ala Glu Asp
100 105 110
Leu Val Asp Thr Phe Phe Glu Val Glu Val Glu Met Glu Lys Glu Val
115 120 125
Cys Arg Asp Leu Val Cys Thr Ser Pro Lys Asp Glu Glu Gly Phe Leu
130 135 140
Arg Asp Leu Cys Glu Val Leu Leu Tyr Leu Leu Leu Pro Pro Gly Asp
145 150 155 160
Phe Gln Asn Lys Ile Met Arg Tyr Phe Val Arg Glu Ile Leu Ala Arg
165 170 175
Gly Ile Leu Pro Pro Leu Ile Asn Gln Leu Ser Asp Pro Asp Tyr Ile
180 185 190
Asn Gln Tyr Val Ile Trp Met Val Gly Ala Phe
195 200

<210> 12601
<211> 1750
<212> DNA
<213> Homo sapiens

<220>
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<222> (114)..(1481)

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05/02/2008 09:45:05

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tgtacgtgat gcccgccgag gagaacgctg atgacagcta cgagccgcct ccagtagagc 420
aggaaaccag gccggttcac ccagccctgc ccttcgccag aggcgagtat atagacaatc 480
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aagataatga tgaaaactat attcatccca cagaaagcag ttcacctcca cctgaaaaag 720
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<210> 12602
<211> 456
<212> PRT
<213> Homo sapiens

<400> 12602
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20 25 30
Met Asn Lys Ile Lys Lys Leu Lys Val Lys Ala Pro Pro Ser Val Pro
35 40 45
Arg Arg Asp Tyr Ala Ser Glu Ser Pro Ala Asp Glu Glu Glu Gln Trp
50 55 60
Ser Asp Asp Phe Asp Ser Asp Tyr Glu Asn Pro Asp Glu His Ser Asp
65 70 75 80
Ser Glu Met Tyr Val Met Pro Ala Glu Glu Asn Ala Asp Asp Ser Tyr
85 90 95
Glu Pro Pro Pro Val Glu Gln Glu Thr Arg Pro Val His Pro Ala Leu
100 105 110

0005-0-0-0

Pro Phe Ala Arg Gly Glu Tyr Ile Asp Asn Arg Ser Ser Gln Arg His
115 120 125
Ser Pro Pro Phe Ser Lys Thr Leu Pro Ser Lys Pro Ser Trp Pro Ser
130 135 140
Glu Lys Ala Arg Leu Thr Ser Thr Leu Pro Ala Leu Thr Ala Leu Gln
145 150 155 160
Lys Pro Gln Val Pro Pro Lys Pro Lys Gly Leu Leu Glu Asp Glu Ala
165 170 175
Asp Tyr Val Val Pro Val Glu Asp Asn Asp Glu Asn Tyr Ile His Pro
180 185 190
Thr Glu Ser Ser Ser Pro Pro Pro Glu Lys Ala Pro Met Val Asn Arg
195 200 205
Ser Thr Lys Pro Asn Ser Ser Thr Pro Ala Ser Pro Pro Gly Thr Ala
210 215 220
Ser Gly Arg Asn Ser Gly Ala Trp Glu Thr Lys Ser Pro Pro Pro Ala
225 230 235 240
Ala Pro Ser Pro Leu Pro Arg Ala Gly Lys Lys Pro Thr Thr Pro Leu
245 250 255
Lys Thr Thr Pro Val Ala Ser Gln Gln Asn Ala Ser Ser Val Cys Gly
260 265 270
Glu Lys Pro Ile Pro Ala Glu Arg His Arg Gly Ser Ser His Arg Gln
275 280 285
Glu Ala Val Gln Ser Pro Val Phe Pro Pro Ala Gln Lys Gln Ile His
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Gln Lys Pro Ile Pro Leu Pro Arg Phe Thr Glu Gly Gly Asn Pro Thr
305 310 315 320
Val Asp Gly Pro Leu Pro Ser Phe Ser Ser Asn Ser Thr Ile Ser Glu
325 330 335
Gln Glu Ala Gly Val Leu Cys Lys Pro Trp Tyr Ala Gly Ala Cys Asp
340 345 350
Arg Lys Ser Ala Glu Glu Ala Leu His Arg Ser Asn Lys Asp Gly Ser
355 360 365
Phe Leu Ile Arg Lys Ser Ser Gly His Asp Ser Lys Gln Pro Tyr Thr
370 375 380
Leu Val Val Phe Phe Asn Lys Arg Val Tyr Asn Ile Pro Val Arg Phe
385 390 395 400
Ile Glu Ala Thr Lys Gln Tyr Ala Leu Gly Arg Lys Lys Asn Gly Glu
405 410 415
Glu Tyr Phe Gly Ser Val Ala Glu Ile Ile Arg Asn His Gln His Ser
420 425 430
Pro Leu Val Leu Ile Asp Ser Gln Asn Asn Thr Lys Asp Ser Thr Arg
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<210> 12603
<211> 1718

0050250-0050800

0098209-950209

<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (285)..(1427)

<400> 12603
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aaaggttgcg actattacca aataggaaaa acctgaagac ataagaacta cacatgagga 240
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taacaatgac gacaacttca gtcagcagct ggccttactc ctcccacaga atgcgcttta 360
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tttgcttaac tgtaaaccat ttcaaggtac tatcttttaa atctgtatgt aaaatctttt 1620
caaaatacat ttttaagcta atactcttaa catagattat gaagttaagt gaaatttatg 1680
gctctaacag caaaataatt aaagtgccat agtttctc 1718

<210> 12604
<211> 381
<212> PRT
<213> Homo sapiens

<400> 12604
Met Arg Ser His Thr Ile Thr Met Thr Thr Thr Ser Val Ser Ser Trp
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0950450 - 0950450

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Pro Pro Gln Asn Phe Ser Ala Thr Pro Asn Val Thr Thr Cys Pro Met
            35                  40                  45
Asp Glu Lys Leu Leu Ser Thr Val Leu Thr Thr Ser Tyr Ser Val Ile
        50                  55                  60
Phe Ile Val Gly Leu Val Gly Asn Ile Ile Ala Leu Tyr Val Phe Leu
 65                  70                  75                  80
Gly Ile His Arg Lys Arg Asn Ser Ile Gln Ile Tyr Leu Leu Asn Val
                85                  90                  95
Ala Ile Ala Asp Leu Leu Leu Ile Phe Cys Leu Pro Phe Arg Ile Met
            100                 105                 110
Tyr His Ile Asn Gln Asn Lys Trp Thr Leu Gly Val Ile Leu Cys Lys
        115                 120                 125
Val Val Gly Thr Leu Phe Tyr Met Asn Met Tyr Ile Ser Ile Ile Leu
    130                 135                 140
Leu Gly Phe Ile Ser Leu Asp Arg Tyr Ile Lys Ile Asn Arg Ser Ile
145                 150                 155                 160
Gln Gln Arg Lys Ala Ile Thr Thr Lys Gln Ser Ile Tyr Val Cys Cys
                165                 170                 175
Ile Val Trp Met Leu Ala Leu Gly Gly Phe Leu Thr Met Ile Ile Leu
            180                 185                 190
Thr Leu Lys Lys Gly Gly His Asn Ser Thr Met Cys Phe His Tyr Arg
        195                 200                 205
Asp Lys His Asn Ala Lys Gly Glu Ala Ile Phe Asn Phe Ile Leu Val
    210                 215                 220
Val Met Phe Trp Leu Ile Phe Leu Leu Ile Ile Leu Ser Tyr Ile Lys
225                 230                 235                 240
Ile Gly Lys Asn Leu Leu Arg Ile Ser Lys Arg Arg Ser Lys Phe Pro
                245                 250                 255
Asn Ser Gly Lys Tyr Ala Thr Thr Ala Arg Asn Ser Phe Ile Val Leu
            260                 265                 270
Ile Ile Phe Thr Ile Cys Phe Val Pro Tyr His Ala Phe Arg Phe Ile
        275                 280                 285
Tyr Ile Ser Ser Gln Leu Asn Val Ser Ser Cys Tyr Trp Lys Glu Ile
    290                 295                 300
Val His Lys Thr Asn Glu Ile Met Leu Val Leu Ser Ser Phe Asn Ser
305                 310                 315                 320
Cys Leu Asp Pro Val Met Tyr Phe Leu Met Ser Ser Asn Ile Arg Lys
                325                 330                 335
Ile Met Cys Gln Leu Leu Phe Arg Arg Phe Gln Gly Glu Pro Ser Arg
            340                 345                 350
Ser Glu Ser Thr Ser Glu Phe Lys Pro Gly Tyr Ser Leu His Asp Thr
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Ser Val Ala Val Lys Ile Gln Ser Ser Ser Lys Ser Thr
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<210> 12605

0509250.000800

<211> 1680
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (224)..(778)

<400> 12605
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cttacgcatt ggggaattgt gtgtattttc tagcacttgt gtattggaaa acctgtatgg 1620
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<210> 12606
<211> 185
<212> PRT
<213> Homo sapiens

<400> 12606
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            20                  25                  30
Leu Trp Glu Ala Gly Asn Leu Thr Asp Leu Pro Asn Leu Arg Ile Gly
        35                  40                  45
Phe Tyr Asn Phe Cys Leu Trp Asn Glu Asp Thr Ser Thr Leu Gln Cys
    50                  55                  60
His Gln Phe Pro Glu Leu Glu Ala Leu Gly Val Pro Arg Val Gly Leu
65                  70                  75                  80
Gly Leu Ala Arg Leu Gly Val Tyr Gly Ser Leu Val Leu Thr Leu Phe
                85                  90                  95
Ala Pro Gln Pro Leu Leu Leu Ala Gln Cys Asn Ser Asp Glu Arg Ala
            100                 105                 110
Trp Arg Leu Ala Val Gly Phe Leu Ala Val Ser Ser Val Leu Leu Ala
        115                 120                 125
Gly Gly Leu Gly Leu Phe Leu Ser Tyr Val Trp Lys Trp Val Arg Leu
    130                 135                 140
Ser Leu Pro Gly Pro Gly Phe Leu Ala Leu Gly Ser Ala Gln Ala Leu
145                 150                 155                 160
Leu Ile Leu Leu Leu Ile Ala Met Ala Val Phe Pro Leu Arg Ala Glu
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Arg Ala Glu Ser Lys Leu Glu Ser Cys
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<210> 12607
<211> 1787
<212> DNA
<213> Homo sapiens

<400> 12607

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gagaacagat atttaaacag gtgctgtatt agtaacagcc agtgcccttt cagcccttgc 480
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ctgcagttca gggctggagt tgttaaggca ttgacctcca cccacctgcc ccatgtccac 720
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US 2003/0059790 A1

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gcaccatttg ttttttattt cattaaagga agtttaattt aaattgg 1787

<210> 12608
<211> 1953
<212> DNA
<213> Homo sapiens

<400> 12608
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agataatcat gatatttaat cctatggagt gctgtgagga ttaactaaaa caatgcattt 180
gaagttcttg gcactatgtc tggcatggag gtatatgact atgatttgta aattgcaatg 240
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<220>
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<222> (7)..(324)

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<212> PRT
<213> Homo sapiens

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His His Asp Glu Trp Pro Phe Gln Cys Ile Val Thr Glu Ile Pro Glu
35 40 45
Asp Ser Pro Gly Leu Gln Phe His Trp Phe Leu Phe Ala Val Phe Ser
50 55 60
Cys Cys Asn Cys Cys Cys Phe Gln Ser Lys Gly Pro Pro Leu Val Lys
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<220>
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<211> 326
<212> PRT
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35 40 45
Ser Gln Ile His Pro Tyr Gln Leu Pro Ser Asp Val Gly Leu Glu Asn
50 55 60
Tyr Asp Ser Cys Tyr Ser Gln Thr Leu Ser Leu His Gly Ser Leu Gly

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Thr Ser Leu Ser Asn Pro Asp Ser Ser Thr Gly Arg Leu Leu Lys Leu
        115                 120                 125
Ser Ser Asp Leu Tyr Ala Thr Thr His Phe Asn Ser Asp Pro Ala Val
    130                 135                 140
Leu Val Asn Val Glu Gln Gln Leu Ser Thr Ser Leu Asp Asp Leu Thr
145                 150                 155                 160
Pro Ala His Gly Ser Val Pro Asn Asn Ala Val Leu Gly Asn Arg Thr
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Thr Pro Leu Arg Thr Leu Leu Leu Ser Pro Gly Thr Ser Glu His Arg
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Lys Ile Phe Thr Lys Arg Ser Leu Ser Pro Ser Lys Arg Gly Phe Lys
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Trp Lys Asp Asn Ile Leu Ala Asn Leu Asn Leu Lys His Gly Phe Gln
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Asp Ala Thr Gly Ser Glu Pro Leu Ser Ser Asp Leu Gly Ser Leu His
225                 230                 235                 240
Gly Leu Ala Gly Asn His Ser Pro Pro Ile Ser Ala Arg Thr Pro His
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Val Ala Thr Val Leu Arg Gln Leu Leu Glu Leu Val Asp Lys His Trp
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Asn Gly Ser Gly Ser Leu Leu Leu Asn Lys Lys Phe Leu Gly Lys Phe
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Glu Ala Lys Thr Gly Gln Ser Ala Gly Gly Lys Pro His Phe Val Arg
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<212> PRT
<213> Homo sapiens

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35 40 45
Gln Gln Pro Ala Ala Ser Thr Gln Leu Pro Thr Thr Pro Ser Ser Asn
50 55 60
Pro Ser Gly Leu Asn Gln His Thr Arg Asn Arg Gln Gly Gln Ser Ser
65 70 75 80
Asp Pro Pro Ser Ala Ser Thr Val Ala Ala Asp Ser Ala Ile Leu Glu
85 90 95

Val Leu Gln Ser Asn Ile Gln His Val Leu Val Tyr Glu Asn Pro Ala
100 105 110
Leu Gln Glu Lys Ala Leu Ala Cys Ile Pro Val Gln Glu Leu Lys Arg
115 120 125
Lys Ser Gln Glu Lys Leu Ser Arg Ala Arg Lys Leu Asp Lys Asp Ile
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Ile Thr Leu Arg Asn Phe Trp Lys Gln Asp Val Asp Gly Val Ala Ser
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<210> 12615
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<212> DNA
<213> Homo sapiens

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<222> (54)..(1544)

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<212> PRT
<213> Homo sapiens

<400> 12616

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Cys	Phe	Phe	Val	Glu	Pro	Asp	Glu	Pro	Phe	His	Ile	Gly	Thr	Pro	Ala
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Glu	Leu	Gln	Phe	Lys	Leu	Lys	Ala	Ile	Asn	Leu	Gln	Thr	Val	Arg	His
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		195					200					205			
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				245					250					255	
Leu	Gln	Gln	Glu	Phe	Val	Asn	Phe	Phe	Leu	Leu	His	Tyr	Lys	Lys	Glu
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Leu Gly Thr Ser Thr Met Leu Val Trp Leu Gly Val Ile Arg Tyr Leu
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Gly Phe Phe Ala Lys Tyr Asn Leu Leu Ile Leu Thr Leu Gln Ala Ala
            340                 345                 350
Leu Pro Asn Val Ile Arg Phe Cys Cys Cys Ala Ala Met Ile Tyr Leu
        355                 360                 365
Gly Tyr Cys Phe Cys Gly Trp Ile Val Leu Gly Pro Tyr His Asp Lys
    370                 375                 380
Phe Arg Ser Leu Asn Met Val Ser Glu Cys Leu Phe Ser Leu Ile Asn
385                 390                 395                 400
Gly Asp Asp Met Phe Ala Thr Phe Ala Lys Met Gln Gln Lys Ser Tyr
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Leu Val Trp Leu Phe Ser Arg Ile Tyr Leu Tyr Ser Phe Ile Ser Leu
            420                 425                 430
Phe Ile Tyr Met Ile Leu Ser Leu Phe Ile Ala Leu Ile Thr Asp Thr
        435                 440                 445
Tyr Glu Thr Ile Lys Gln Tyr Gln Gln Asp Gly Phe Pro Glu Thr Glu
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Leu Arg Thr Phe Ile Ser Glu Cys Lys Asp Leu Pro Asn Ser Gly Lys
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<211> 1682
<212> DNA
<213> Homo sapiens

<220>
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<222> (449)..(949)

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catttcatat atttacagca catagttaat ttgagtagag tcaaattaat cttactttag 240
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aggccgtttt actaggtgta ctttgtctta atcatattcc tatttttta tacagctgtg 360
caaccatatt gcttctggga aaaaatgtca atatgtggga aactgttcct ttgctcatag 420
tcctgaggaa agagaagttt ggacttacat gaaggagaat gggatacaag atatggagca 480

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<212> PRT
<213> Homo sapiens

<400> 12618

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Asn Lys Glu Asn Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu
         35                  40                  45
Val Thr Val Asp Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser
     50                  55                  60
Glu Lys Gln Trp Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys
 65                  70                  75                  80
Val Phe His Thr Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro
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Thr Gly Tyr Phe Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro
            100                 105                 110
Glu Gly Asn Ser Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu
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Trp Glu Glu Arg Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg
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Lys Asp His Leu Ile Gly Pro Asn Asp Asn Asp Phe Gly Lys Tyr Ser
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165

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<212> DNA
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<210> 12620
<211> 278
<212> PRT
<213> Homo sapiens

<400> 12620
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20 25 30

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Lys Val Ala Leu Ala Thr Ala Ser Thr Asp Gly Ile Gly Phe Ala Ile
35 40 45
Ala Arg Arg Leu Ala Gln Asp Gly Ala His Val Val Val Ser Ser Arg
50 55 60
Lys Gln Gln Asn Val Asp Gln Ala Val Ala Thr Leu Gln Gly Glu Gly
65 70 75 80
Leu Ser Val Thr Gly Thr Val Cys His Val Gly Lys Ala Glu Asp Arg
85 90 95
Glu Arg Leu Val Ala Thr Ala Val Lys Leu His Gly Gly Ile Asp Ile
100 105 110
Leu Val Ser Asn Ala Ala Val Asn Pro Phe Phe Gly Ser Ile Met Asp
115 120 125
Val Thr Glu Glu Val Trp Asp Lys Thr Leu Asp Ile Asn Val Lys Ala
130 135 140
Pro Ala Leu Met Thr Lys Ala Val Val Pro Glu Met Glu Lys Arg Gly
145 150 155 160
Gly Gly Ser Val Val Ile Val Ser Ser Ile Ala Ala Phe Ser Pro Ser
165 170 175
Pro Gly Phe Ser Pro Tyr Asn Val Ser Lys Thr Ala Leu Leu Gly Leu
180 185 190
Thr Lys Thr Leu Ala Ile Glu Leu Ala Pro Arg Asn Ile Arg Val Asn
195 200 205
Cys Leu Ala Pro Gly Leu Ile Lys Thr Ser Phe Ser Arg Met Leu Trp
210 215 220
Met Asp Lys Glu Lys Glu Glu Ser Met Lys Glu Thr Leu Arg Ile Arg
225 230 235 240
Arg Leu Gly Glu Pro Glu Asp Cys Ala Gly Ile Val Ser Phe Leu Cys
245 250 255
Ser Glu Asp Ala Ser Tyr Ile Thr Gly Glu Thr Val Val Val Gly Gly
260 265 270
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275

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<212> DNA
<213> Homo sapiens

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EP 2 395 076 A1

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<211> 1819
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (4)..(456)

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<211> 151
<212> PRT
<213> Homo sapiens

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20 25 30
Ser Ile Thr Gln Trp Ile Val Asp Met Glu Gly Ala Ser Gly Thr Leu
35 40 45
Tyr Glu Gly Glu Lys Phe Gln Leu Leu Phe Lys Phe Ser Ser Arg Tyr
50 55 60
Pro Phe Asp Ser Pro Gln Val Met Phe Thr Gly Glu Asn Ile Pro Val
65 70 75 80
His Pro His Val Tyr Ser Asn Gly His Ile Cys Leu Ser Ile Leu Thr
85 90 95
Glu Asp Trp Ser Pro Ala Leu Ser Val Gln Ser Val Cys Leu Ser Ile
100 105 110
Ile Ser Met Leu Ser Ser Cys Lys Glu Lys Arg Arg Pro Pro Asp Asn
115 120 125
Ser Phe Tyr Val Arg Thr Cys Asn Lys Asn Pro Lys Lys Thr Lys Trp
130 135 140
Trp Tyr His Asp Asp Thr Cys
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<210> 12625
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<212> DNA
<213> Homo sapiens

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0050205.0050205

<220>
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<222> (4)..(1338)

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<212> PRT
<213> Homo sapiens

<400> 12626
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20 25 30

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35 40 45
Lys Leu Glu Arg Val Phe Ala Lys Pro Phe Leu Ala Ser Leu Asp Gly
50 55 60
His Arg Asp Gly Val Asn Cys Leu Ala Lys His Pro Glu Lys Leu Ala
65 70 75 80
Thr Val Leu Ser Gly Ala Cys Asp Gly Glu Val Arg Ile Trp Asn Leu
85 90 95
Thr Gln Arg Asn Cys Ile Arg Thr Ile Gln Ala His Glu Gly Phe Val
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Arg Gly Ile Cys Thr Arg Phe Cys Gly Thr Ser Phe Phe Thr Val Gly
115 120 125
Asp Asp Lys Thr Val Lys Gln Trp Lys Met Asp Gly Pro Gly Tyr Gly
130 135 140
Asp Glu Glu Glu Pro Leu His Thr Ile Leu Gly Lys Thr Val Tyr Thr
145 150 155 160
Gly Ile Asp His His Trp Lys Glu Ala Val Phe Ala Thr Cys Gly Gln
165 170 175
Gln Val Asp Ile Trp Asp Glu Gln Arg Thr Asn Pro Ile Cys Ser Met
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Thr Trp Gly Phe Asp Ser Ile Ser Ser Val Lys Phe Asn Pro Ile Glu
195 200 205
Thr Phe Leu Leu Gly Ser Cys Ala Ser Asp Arg Asn Ile Val Leu Tyr
210 215 220
Asp Met Arg Gln Ala Thr Pro Leu Lys Lys Val Ile Leu Asp Met Arg
225 230 235 240
Thr Asn Thr Ile Cys Trp Asn Pro Met Glu Ala Phe Ile Phe Thr Ala
245 250 255
Ala Asn Glu Asp Tyr Asn Leu Tyr Thr Phe Asp Met Arg Ala Leu Asp
260 265 270
Thr Pro Val Met Val His Met Asp His Val Ser Ala Val Leu Asp Val
275 280 285
Asp Tyr Ser Pro Thr Gly Lys Glu Phe Val Ser Ala Ser Phe Asp Lys
290 295 300
Ser Ile Arg Ile Phe Pro Val Asp Lys Ser Arg Ser Arg Glu Val Tyr
305 310 315 320
His Thr Lys Arg Met Gln His Val Ile Cys Val Lys Trp Thr Ser Asp
325 330 335
Ser Lys Tyr Ile Met Cys Gly Ser Asp Glu Met Asn Ile Arg Leu Trp
340 345 350
Lys Ala Asn Ala Ser Glu Lys Leu Gly Val Leu Thr Ser Arg Glu Lys
355 360 365
Ala Ala Lys Asp Tyr Asn Gln Lys Leu Lys Glu Lys Phe Gln His Tyr
370 375 380
Pro His Ile Lys Arg Ile Ala Arg His Arg His Leu Pro Lys Ser Ile
385 390 395 400
Tyr Ser Gln Ile Gln Glu Gln Arg Ile Met Lys Glu Ala Arg Arg Arg
405 410 415

0960960-0962800

Lys Glu Val Asn Arg Ile Lys His Ser Lys Pro Gly Ser Val Pro Leu
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Val Ser Glu Lys Lys Lys His Val Val Ala Val Val Lys
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<210> 12627
<211> 2261
<212> DNA
<213> Homo sapiens

<400> 12627
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<211> 1703
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (123)..(794)

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<210> 12629
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<212> PRT

0090/0450 - 0090/0450

<213> Homo sapiens

<400> 12629

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Lys Ala Asp Pro Arg Ala Leu Leu Glu Cys Arg Arg Glu Leu Met Gln
         35                  40                  45
Leu Glu Lys Glu Leu Val Glu Arg Gln Pro Gln Val Asp Met Leu Gln
     50                  55                  60
Glu Ile Ser Asn Ser Leu Leu Ile Lys Gly His Gly Glu Asp Cys Ile
 65                  70                  75                  80
Glu Ala Glu Glu Lys Val His Val Ile Glu Lys Lys Leu Lys Gln Leu
                 85                  90                  95
Arg Glu Gln Val Ser Gln Asp Leu Met Ala Leu Gln Gly Thr Gln Asn
            100                 105                 110
Pro Ala Ser Pro Leu Pro Ser Phe Asp Glu Val Asp Ser Gly Asp Gln
        115                 120                 125
Pro Pro Ala Thr Ser Val Pro Ala Pro Arg Ala Lys Phe Arg Ala Val
    130                 135                 140
Arg Thr Thr Glu Gly Glu Glu Glu Thr Glu Ser Arg Val Pro Gly Ser
145                 150                 155                 160
Thr Arg Pro Gln Arg Ser Phe Leu Ser Arg Val Val Arg Ala Ala Leu
                165                 170                 175
Pro Leu Gln Leu Leu Leu Leu Leu Leu Leu Leu Leu Ala Cys Leu Leu
            180                 185                 190
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Arg Ser Phe Tyr Pro Met Leu Gly Tyr Thr Asn Gly Pro Pro Pro Thr
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (102)..(1565)

<400> 12630

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<210> 12631
<211> 488
<212> PRT
<213> Homo sapiens

<400> 12631
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Ala Glu Gly Lys Ile Tyr Lys Tyr Asp His Met Glu Lys Ser Val Asn
35 40 45
Ser Ser Ser Leu Val Ser Pro Pro Gln Arg Ile Ser Ser Thr Val Lys
50 55 60

Doc No. 0576-0702

0050250-0050800

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Thr His Ile Ser His Ile Tyr Glu Cys Asn Phe Val Asp Ser Leu Phe
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Thr Gln Lys Glu Lys Ala Asn Ile Gly Thr Glu His Tyr Lys Cys Asn
                85                  90                  95
Glu Arg Gly Lys Ala Phe His Gln Gly Leu His Phe Thr Ile His Gln
            100                 105                 110
Ile Ile His Thr Lys Glu Thr Gln Phe Lys Cys Asp Ile Cys Gly Lys
        115                 120                 125
Ile Phe Asn Lys Lys Ser Asn Leu Ala Ser His Gln Arg Ile His Thr
    130                 135                 140
Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe His Asn
145                 150                 155                 160
Met Ser His Leu Ala Gln His Arg Arg Ile His Thr Gly Glu Lys Pro
                165                 170                 175
Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Asn Gln Ile Ser His Leu
            180                 185                 190
Ala Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn
        195                 200                 205
Glu Cys Gly Lys Val Phe His Gln Ile Ser His Leu Ala Gln His Arg
    210                 215                 220
Thr Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Lys Cys Gly Lys
225                 230                 235                 240
Val Phe Ser Arg Asn Ser Tyr Leu Val Gln His Leu Ile Ile His Thr
                245                 250                 255
Gly Glu Lys Pro Tyr Arg Cys Asn Val Cys Gly Lys Val Phe Ser His
            260                 265                 270
Lys Ser Ser Leu Val Asn His Trp Arg Ile His Thr Gly Glu Lys Pro
        275                 280                 285
Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Ser His Lys Ser Ser Leu
    290                 295                 300
Val Asn His Trp Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn
305                 310                 315                 320
Glu Cys Gly Lys Val Phe Ser Arg Asn Ser Tyr Leu Ala Gln His Leu
                325                 330                 335
Ile Ile His Ala Gly Glu Lys Pro Tyr Lys Cys Asp Glu Cys Asp Lys
            340                 345                 350
Ala Phe Ser Gln Asn Ser His Leu Val Gln His His Arg Ile His Thr
        355                 360                 365
Gly Glu Lys Pro Tyr Lys Cys Asp Glu Cys Gly Lys Val Phe Ser Gln
    370                 375                 380
Asn Ser Tyr Leu Ala Tyr His Trp Arg Ile His Thr Gly Glu Lys Ala
385                 390                 395                 400
Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Gly Leu Asn Ser Ser Leu
                405                 410                 415
Ala His His Arg Lys Ile His Thr Gly Glu Lys Pro Phe Lys Cys Asn
            420                 425                 430
Glu Cys Gly Lys Ala Phe Ser Met Arg Ser Ser Leu Thr Asn His His
        435                 440                 445
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Ala Ile His Thr Gly Glu Lys His Phe Lys Cys Asn Glu Cys Gly Lys
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Leu Phe Arg Asp Asn Ser Tyr Leu Val Arg His Gln Arg Phe His Ala
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Gly Lys Lys Ser Asn Thr Cys Asn
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<210> 12632
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<212> DNA
<213> Homo sapiens

<220>
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<222> (28)..(1242)

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tattaccaag atgaacccca aaagaagaac aaaggtgatc ccatgaacaa cctggaaagt 600
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<210> 12633
<211> 405
<212> PRT
<213> Homo sapiens

<400> 12633
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Gln Leu Asp Thr Ser Val Ser Ile Glu Glu Cys Met Ser Lys Lys Glu
35 40 45
Ser Phe Ala Pro Gly Thr Met Tyr Lys Pro Phe Gly Lys Glu Ala Ala
50 55 60
Gly Thr Met Thr Leu Ser Gln Phe Gln Thr Leu His Glu Lys Asp Gln
65 70 75 80
Glu Thr Ala Ser Leu Arg Glu Leu Gly Leu Asn Glu Thr Glu Ile Leu
85 90 95
Ile Trp Lys Ser His Val Ser Gly Glu Lys Lys Thr Lys Leu Arg Ala
100 105 110
Thr Pro Glu Ala Ile Gln Asn Arg Leu Gln Asp Ile Glu Glu Arg Ile
115 120 125
Ser Glu Arg Gln Arg Ile Leu Cys Leu Pro Gln Arg Phe Ala Lys Ser
130 135 140
Lys Gln Leu Thr Arg Arg Glu Met Glu Ile Glu Lys Ser Leu Phe Gln
145 150 155 160
Gly Ala Asp Arg His Ser Phe Leu Lys Ala Leu Tyr Tyr Gln Asp Glu
165 170 175
Pro Gln Lys Lys Asn Lys Gly Asp Pro Met Asn Asn Leu Glu Ser Phe
180 185 190
Tyr Gln Glu Met Ile Met Lys Lys Arg Leu Glu Glu Phe Gln Leu Met
195 200 205
Arg Gly Glu Pro Phe Ala Ser His Ser Leu Val Ser Ala Thr Ser Val

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Ile Asp Phe Ser Pro Glu Gln Cys Trp Thr Gly Pro Lys Lys Leu Thr
            260                 265                 270
Gln Pro Ile Glu Phe Val Pro Glu Asp Glu Ile Gln Arg Asn Arg Leu
        275                 280                 285
Ser Glu Glu Glu Ile Arg Lys Ile Pro Met Phe Ser Ser Tyr Asn Pro
    290                 295                 300
Gly Glu Pro Asn Lys Val Leu Tyr Leu Lys Asn Leu Ser Pro Arg Val
305                 310                 315                 320
Thr Glu Arg Asp Leu Val Ser Leu Phe Ala Arg Phe Gln Glu Lys Lys
                325                 330                 335
Gly Pro Pro Ile Gln Phe Arg Met Met Thr Gly Arg Met Arg Gly Gln
            340                 345                 350
Ala Phe Ile Thr Phe Pro Asn Lys Glu Ile Ala Trp Gln Ala Leu His
        355                 360                 365
Leu Val Asn Gly Tyr Lys Leu His Gly Lys Ile Leu Val Ile Glu Phe
    370                 375                 380
Gly Lys Asn Lys Lys Gln Arg Ser Asn Leu Gln Ala Thr Ser Leu Ile
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Ser Cys Ala Thr Gly
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<210> 12634
<211> 1935
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (179)..(1120)

<400> 12634
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<210> 12635
<211> 314
<212> PRT
<213> Homo sapiens

<400> 12635

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			20					25					30		
Leu	Asp	Glu	Asp	Asp	Thr	Asp	Lys	Leu	Lys	Gly	Lys	Trp	Ser	Ser	Glu
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Val	Leu	Val	Gln	Lys	Asn	Asp	Pro	Gln	Arg	Gln	Gly	Ser	Lys	Lys	Thr
	50					55					60				
Glu	Ser	Ser	Ser	Arg	Thr	Ala	Asp	Pro	Trp	Glu	Pro	Cys	Trp	Pro	His
65					70					75					80
Gln	Gly	Pro	Leu	Pro	Gln	Gly	Asp	Ala	Gly	Gly	Glu	His	His	Ala	Cys
				85					90					95	
Gly	Val	Asn	Gly	Ile	Gly	Pro	Ala	Ala	Thr	Pro	Gln	Pro	Thr	Gly	Asn
			100					105					110		
Ser	Ser	Pro	Thr	Gln	Asp	Asp	Arg	Gly	Ser	Trp	Ala	Ser	Thr	Ala	Asn
		115					120					125			
Thr	Val	Pro	Pro	Thr	Gln	Pro	Phe	Leu	Glu	Gly	Gly	Gly	Thr	Arg	Lys
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0500200.0500800

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Gly Asp Ser Arg Ala Pro Ser Glu Ala Glu Ser Phe Ala Leu Glu Val
                165                 170                 175
Gln Asp His Val Phe Gln Ile Pro Ala Pro Asp Tyr Leu Gln His Trp
            180                 185                 190
Gly Pro Ala Gly Asp Asn Val Asp His Asn Glu Lys Asp Cys Val Phe
        195                 200                 205
Lys Asn His Thr Glu Asp Glu Ser Leu Glu Gly Ile Gln Pro Pro Val
    210                 215                 220
Gly Glu His Gly Leu Asn Thr Pro Phe Ser Val Arg Arg Ser Trp Asp
225                 230                 235                 240
Ser Leu Asn Glu Asp Val Glu Thr Glu Val Leu Ser Ile Cys Phe Asn
                245                 250                 255
Glu Lys Gly Pro Val His Ala Met Pro Val Val Asp Ser Gly Asn Arg
            260                 265                 270
Gln Gly Asp Thr His Gly Ser Asp Gly Asp Gly Asp Gly Glu Ile Val
        275                 280                 285
Asp Glu Asp Ala Ala Val Ala Glu Ala Leu Ala Ala Leu Glu Ala Ala
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Thr Ala Gly Glu Asp Leu Asp Glu Thr Asp
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<210> 12636
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<212> DNA
<213> Homo sapiens

<220>
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<222> (171)..(1985)

<400> 12636

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<211> 605
<212> PRT
<213> Homo sapiens

<400> 12637
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Ile Asn Arg Thr Val Pro Leu Arg Cys Leu Glu Glu His Tyr Gly Thr
35 40 45
Ser Pro Gly Gln Ala Arg Glu Gly Ser Leu Thr Lys Gly Arg Pro Asp
50 55 60
Val Ala Lys Arg Leu Ser Leu Thr Met Gly Gly Val Gln Ala Arg Glu
65 70 75 80
Gln Asn Leu Pro Arg Gly Asn Leu Leu Arg Asn Lys Glu Lys Ser Gly
85 90 95
Ser Gln Pro Ala Cys Leu Asp His Met Gln Asp Arg Arg Ala Leu Ser

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Leu Lys Ala His Gln Ser Glu Ser Tyr Leu Pro Ile Gly Cys Lys Leu
        115                 120                 125
Pro Pro Gln Ser Ser Gly Val Asp Thr Ser Pro Cys Pro Asn Ser Pro
    130                 135                 140
Val Phe Arg Thr Gly Ser Glu Pro Ala Leu Ser Pro Ala Val Val Arg
145                 150                 155                 160
Arg Val Ser Ser Asp Ala Arg Ala Gly Glu Ala Leu Arg Gly Ser Asp
                165                 170                 175
Ser Gln Leu Cys Pro Lys Pro Pro Pro Lys Pro Cys Lys Val Pro Phe
            180                 185                 190
Leu Lys Val Pro Ser Ser Pro Ser Ala Trp Leu Asn Ser Glu Ala Asn
        195                 200                 205
Tyr Cys Glu Leu Asn Pro Ala Phe Ala Thr Gly Cys Gly Arg Gly Ala
    210                 215                 220
Lys Leu Pro Ser Cys Ala Gln Gly Ser His Thr Glu Leu Leu Thr Ala
225                 230                 235                 240
Lys Gln Asn Glu Ala Pro Gly Pro Arg Asn Ser Gly Val Asn Tyr Leu
                245                 250                 255
Ile Leu Asp Asp Asp Asp Arg Glu Arg Pro Trp Glu Pro Ala Ala Ala
            260                 265                 270
Gln Met Glu Lys Gly Gln Trp Asp Lys Gly Glu Phe Val Thr Pro Leu
        275                 280                 285
Leu Glu Thr Val Ser Ser Phe Arg Pro Asn Glu Phe Glu Ser Lys Phe
    290                 295                 300
Leu Pro Pro Glu Asn Lys Pro Leu Glu Thr Ala Met Leu Lys Arg Ala
305                 310                 315                 320
Lys Glu Leu Phe Thr Asn Asn Asp Pro Lys Val Ile Ala Gln His Val
                325                 330                 335
Leu Ser Met Asp Cys Arg Val Ala Arg Ile Leu Gly Val Ser Glu Glu
            340                 345                 350
Met Arg Arg Asn Met Gly Val Ser Ser Gly Leu Glu Leu Ile Thr Leu
        355                 360                 365
Pro His Gly His Gln Leu Arg Leu Asp Ile Ile Glu Arg His Asn Thr
    370                 375                 380
Met Ala Ile Gly Ile Ala Val Asp Ile Leu Gly Cys Thr Gly Thr Leu
385                 390                 395                 400
Glu Asp Arg Ala Ala Thr Leu Ser Lys Ile Ile Gln Val Ala Val Glu
                405                 410                 415
Leu Lys Asp Ser Met Gly Asp Leu Tyr Ser Phe Ser Ala Leu Met Lys
            420                 425                 430
Ala Leu Glu Met Pro Gln Ile Thr Arg Leu Glu Lys Thr Trp Thr Ala
        435                 440                 445
Leu Arg His Gln Tyr Thr Gln Thr Ala Ile Leu Tyr Glu Lys Gln Leu
    450                 455                 460
Lys Pro Phe Ser Lys Leu Leu His Glu Gly Arg Glu Ser Thr Cys Val
465                 470                 475                 480
Pro Pro Asn Asn Val Ser Val Pro Leu Leu Met Pro Leu Val Thr Leu
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0604050.0604000

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                485                 490                 495
Met Glu Arg Gln Ala Val Thr Phe Glu Gly Thr Asp Met Trp Glu Lys
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Asn Asp Gln Ser Cys Glu Ile Met Leu Asn His Leu Ala Thr Ala Arg
        515                 520                 525
Phe Met Ala Glu Ala Ala Asp Ser Tyr Arg Met Asn Ala Glu Arg Ile
    530                 535                 540
Leu Ala Gly Phe Gln Pro Asp Glu Glu Met Asn Glu Ile Cys Lys Thr
545                 550                 555                 560
Glu Phe Gln Met Arg Leu Leu Trp Gly Ser Lys Gly Ala Gln Val Asn
                565                 570                 575
Gln Thr Glu Arg Tyr Glu Lys Phe Asn Gln Ile Leu Thr Ala Leu Ser
            580                 585                 590
Arg Lys Leu Glu Pro Pro Pro Val Lys Gln Ala Glu Leu
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<210> 12638
<211> 1719
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (179)..(1618)

<400> 12638

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09/09/2004 09:52:36 - 09/09/2004

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<212> PRT
<213> Homo sapiens

<400> 12639

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Glu Tyr Asp Asp Asn Asp Phe Ala Glu Phe Glu Asp Val Met Glu Asp
        35                  40                  45
Ser Val Thr Glu Ser Pro Gln Arg Val Ile Ile Thr Glu Asp Asp Glu
    50                  55                  60
Asp Glu Thr Thr Val Glu Leu Glu Gly Gln Asp Glu Asn Gln Glu Gly
65                  70                  75                  80
Asp Phe Glu Asp Ala Asp Thr Gln Glu Gly Asp Thr Glu Ser Glu Pro
                85                  90                  95
Tyr Asp Asp Glu Glu Phe Glu Gly Tyr Glu Asp Lys Pro Asp Thr Ser
            100                 105                 110
Ser Ser Lys Asn Lys Asp Pro Ile Thr Ile Val Asp Val Pro Ala His
        115                 120                 125
Leu Gln Asn Ser Trp Glu Ser Tyr Tyr Leu Glu Ile Leu Met Val Thr
    130                 135                 140
Gly Leu Leu Ala Tyr Ile Met Asn Tyr Ile Ile Gly Lys Asn Lys Asn
145                 150                 155                 160
Ser Arg Leu Ala Gln Ala Trp Phe Asn Thr His Arg Glu Leu Leu Glu
                165                 170                 175
Ser Asn Phe Thr Leu Val Gly Asp Asp Gly Thr Asn Lys Glu Ala Thr
            180                 185                 190
Ser Thr Gly Lys Leu Asn Gln Glu Asn Glu His Ile Tyr Asn Leu Trp
        195                 200                 205
Cys Ser Gly Arg Val Cys Cys Glu Gly Met Leu Ile Gln Leu Arg Phe
    210                 215                 220
Leu Lys Arg Gln Asp Leu Leu Asn Val Leu Ala Arg Met Met Arg Pro
225                 230                 235                 240
Val Ser Asp Gln Val Gln Ile Lys Val Thr Met Asn Asp Glu Asp Met
                245                 250                 255
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0092045.0092800

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Gln Lys Glu Met Gln Asp Leu Ser Glu Phe Cys Ser Asp Lys Pro Lys
        275                 280                 285
Ser Gly Ala Lys Tyr Gly Leu Pro Asp Ser Leu Ala Ile Leu Ser Glu
    290                 295                 300
Met Gly Glu Val Thr Asp Gly Met Met Asp Thr Lys Met Val His Phe
305                 310                 315                 320
Leu Thr His Tyr Ala Asp Lys Ile Glu Ser Val His Phe Ser Asp Gln
                325                 330                 335
Phe Ser Gly Pro Lys Ile Met Gln Glu Glu Gly Gln Pro Leu Lys Leu
            340                 345                 350
Pro Asp Thr Lys Arg Thr Leu Leu Phe Thr Phe Asn Val Pro Gly Ser
        355                 360                 365
Gly Asn Thr Tyr Pro Lys Asp Met Glu Ala Leu Leu Pro Leu Met Asn
    370                 375                 380
Met Val Ile Tyr Ser Ile Asp Lys Ala Lys Lys Phe Arg Leu Asn Arg
385                 390                 395                 400
Glu Gly Lys Gln Lys Ala Asp Lys Asn Arg Ala Arg Val Glu Glu Asn
                405                 410                 415
Phe Leu Lys Leu Thr His Val Gln Arg Gln Glu Ala Ala Gln Ser Arg
            420                 425                 430
Arg Glu Glu Lys Lys Arg Ala Glu Lys Glu Arg Ile Met Asn Glu Glu
        435                 440                 445
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<211> 1316
<212> DNA
<213> Homo sapiens

<220>
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<222> (12)..(314)

<400> 12640
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0080-0080-0080-0080

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<210> 12641
<211> 101
<212> PRT
<213> Homo sapiens

<400> 12641
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20 25 30
Glu Glu Pro Trp Asp Ile Arg Asn Leu Leu Ile Trp Ile Lys Lys Asn
35 40 45
Leu Leu Lys Glu Arg Pro Glu Leu Phe Ile Gln Gly Asp Ser Val Arg
50 55 60
Pro Gly Ile Leu Val Leu Ile Asn Asp Ala Asp Trp Glu Leu Leu Gly
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Glu Leu Asp Tyr Gln Leu Gln Asp Gln Asp Ser Val Leu Phe Ile Ser
85 90 95
Thr Leu His Gly Gly
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<210> 12642
<211> 2093
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1429)..(2091)

<400> 12642

0050-0045-0000

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Glu Gly Arg Asp Arg Leu Leu Val Gln Leu Pro Leu Ser Leu Val Tyr
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Glu Lys His Trp Arg Leu Leu Glu Ser Met Lys Ala Gln Tyr Val Ala
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<400> 12645

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Arg Thr Ser Phe Gln Asp His Ala Val Trp Lys Pro Leu Met Lys Val
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Leu Gln Asn Ala Pro Asp Glu Ile Leu Val Val Ala Ser Ser Met Leu
        195                 200                 205
Cys Asn Leu Leu Leu Glu Phe Ser Pro Ser Lys Glu Pro Ile Leu Glu
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Ser Gly Ala Val Glu Leu Leu Cys Gly Leu Thr Gln Ser Glu Asn Pro
225                 230                 235                 240
Ala Leu Arg Val Asn Gly Ile Trp Ala Leu Met Asn Met Ala Phe Gln
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            260                 265                 270
Gln Leu Phe Arg Leu Leu Ser Asp Ser Asp Leu Asn Val Leu Met Lys
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Thr Leu Gly Leu Leu Arg Ser Leu Leu Ser Thr Arg Pro His Ile Asp
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Lys Ile Met Ser Thr His Gly Lys Gln Ile Met Gln Ala Val Thr Leu
305                 310                 315                 320
Ile Leu Glu Gly Glu His Asn Ile Glu Val Lys Glu Gln Thr Leu Cys
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Ile Leu Ala Asn Ile Ala Asp Gly Thr Thr Ala Lys Asp Leu Ile Met
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Thr Asn Asp Asp Ile Leu Gln Lys Ile Lys Tyr Tyr Met Gly His Ser
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His Val Lys Leu Gln Leu Ala Ala Met Phe Cys Ile Ser Asn Leu Ile
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Trp Asn Glu Glu Glu Gly Ser Gln Glu Arg Gln Asp Lys Leu Arg Asp
385                 390                 395                 400
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<213> Homo sapiens

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Ala Ala Leu Leu Ala Ser Gly Thr Gln Val Thr Pro Gln Ile Ala Met
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Ala Ala Gln Met Ala Ala Leu Gln Ala Lys Ala Leu Ala Glu Thr Gly
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Ile Ala Val Pro Ser Tyr Tyr Asn Pro Ala Ala Val Asn Pro Met Lys
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Phe Ala Glu Gln Glu Lys Lys Arg Lys Met Leu Trp Gln Gly Lys Lys
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Gly Asn Lys Asp Gln Asn Val Lys Phe Arg Lys Leu Met Gly Ile Lys
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Ser Glu Asp Glu Ala Gly Cys Ser Ser Val Asp Glu Glu Ser Tyr Lys
145 150 155 160
Thr Leu Lys Gln Gln Glu Glu Val Phe Arg Asn Leu Asp Ala Gln Tyr
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Glu Ser Gln Pro Leu Gly Ser Phe Leu Ile Arg Val Ser His Ser His
50 55 60
Val Gly Tyr Thr Leu Ser Tyr Lys Ala Gln Ser Ser Cys Cys His Phe
65 70 75 80
Met Val Lys Leu Leu Asp Asp Gly Thr Phe Met Ile Pro Gly Glu Lys
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Val Ala His Thr Ser Leu Asp Ala Leu Val Thr Phe His Gln Gln Lys
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115 120 125
Asp Pro Ala Asn Val Asp Tyr Glu Asp Leu Phe Leu Tyr Ser Asn Ala
130 135 140
Val Ala Glu Glu Ala Ala Cys Pro Val Ser Ala Pro Glu Glu Ala Ser
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Pro Lys Pro Val Leu Cys His Gln Ser Lys Glu Arg Lys Pro Ser Ala
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Glu Met Asn Arg Ile Thr Thr Lys Glu Ala Thr Ser Ser Cys Pro Pro
180 185 190
Lys Ser Pro Leu Gly Glu Thr Arg Gln Lys Leu Trp Arg Ser Leu Lys
195 200 205
Met Leu Pro Glu Arg Gly Gln Arg Val Arg Gln Gln Leu Lys Ser His
210 215 220
Leu Ala Thr Val Asn Leu Ser Ser Leu Leu Asp Val Arg Arg Ser Thr
225 230 235 240
Val Ile Ser Gly Pro Gly Thr Gly Lys Gly Ser Gln Asp His Ser Gly
245 250 255
Asp Pro Thr Ser Gly Asp Arg Gly Tyr Thr Asp Pro Cys Val Ala Thr
260 265 270
Ser Leu Lys Ser Pro Ser Gln Pro Gln Ala Pro Lys Asp Arg Lys Val

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        275                 280                 285
Pro Thr Arg Lys Ala Glu Arg Ser Val Ser Cys Ile Glu Val Thr Pro
    290                 295                 300
Gly Asp Arg Ser Trp His Gln Met Val Val Arg Ala Leu Ser Ser Gln
305                 310                 315                 320
Glu Ser Lys Pro Glu His Gln Gly Leu Ala Glu Pro Glu Asn Asp Gln
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<211> 1830
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (7)..(1140)

<400> 12651
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<211> 378
<212> PRT
<213> Homo sapiens

<400> 12652
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Ile Asp Asp Lys Gly Val Phe Val Ala Gly Tyr Glu Ser Leu Lys Lys
35 40 45
Asn Glu Ile Leu His Leu Lys Leu Pro Leu Arg Leu Ser Val Lys Glu
50 55 60
Asn Lys Gly Leu Phe Pro Glu Arg Asp Phe Lys Val Arg His Gly Gly
65 70 75 80
Phe Ser Asp Arg Ser Ile Phe Asp Leu Lys His Val Pro His Thr Arg
85 90 95
Leu Leu Val Thr Ser Gly Leu Pro Gly Cys Tyr Leu Gln Val Trp Gln
100 105 110
Val Ala Glu Asp Ser Asp Val Ile Lys Ala Val Ser Thr Ile Ala Val
115 120 125
His Glu Lys Glu Glu Ser Leu Trp Pro Arg Val Ala Val Phe Ser Thr
130 135 140
Leu Ala Pro Gly Val Leu His Gly Ala Arg Leu Arg Ser Leu Gln Val
145 150 155 160
Val Asp Leu Glu Ser Arg Lys Thr Thr Tyr Thr Ser Asp Val Ser Asp
165 170 175
Ser Glu Glu Leu Ser Ser Leu Gln Val Leu Asp Ala Asp Thr Phe Ala
180 185 190
Phe Cys Cys Ala Ser Gly Arg Leu Gly Leu Val Asp Thr Arg Gln Lys
195 200 205
Trp Ala Pro Leu Glu Asn Arg Ser Pro Gly Pro Gly Ser Gly Gly Lys
210 215 220
Arg Trp Cys Ala Glu Val Gly Ser Trp Gly Gln Gly Pro Gly Pro Ser
225 230 235 240
Ile Ala Ser Leu Gly Ser Asp Gly Arg Leu Cys Leu Leu Asp Pro Arg
245 250 255
Asp Leu Cys His Pro Val Ser Ser Val Gln Cys Pro Val Ser Val Pro
260 265 270
Ser Pro Asp Pro Glu Leu Leu Arg Val Thr Trp Ala Pro Gly Leu Lys
275 280 285

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Ala Thr Ser Trp Asp Gly Thr Arg Ser Gln Asp Gly Thr Arg Ser Gln
305                 310                 315                 320
Val Glu Pro Leu Phe Thr His Arg Gly His Ile Phe Leu Asp Gly Asn
                325                 330                 335
Gly Met Asp Pro Ala Pro Leu Val Thr Thr His Thr Trp His Pro Cys
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Arg Pro Arg Thr Leu Leu Ser Ala Thr Asn Asp Ala Ser Leu His Val
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Trp Asp Trp Val Asp Leu Cys Ala Pro Arg
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<211> 2184
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
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<211> 107
<212> PRT
<213> Homo sapiens

<400> 12654
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Lys Thr Lys Ile Leu Lys Glu Lys Asn Lys Tyr Leu Ile Gln Asp Phe
35 40 45
Ile Ala Tyr Leu Glu Gln Glu Trp Gln Thr Phe Ser Val Lys Asp Tyr
50 55 60
Ile Glu Asn Ile Phe His Lys Val Tyr Val Ala Thr Ser Gln Leu Cys
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<210> 12655
<211> 1943
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (139)..(843)

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<210> 12656
<211> 235
<212> PRT
<213> Homo sapiens

<400> 12656

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			20					25					30		
Thr	Ala	Lys	Phe	Lys	Glu	Val	Ile	Pro	Ile	Ser	Asp	Pro	Glu	Leu	Lys
		35					40					45			
Gln	Lys	Ile	His	Gln	Thr	Tyr	Arg	Val	Gln	Tyr	Ile	Gln	Asp	Met	Val
	50					55					60				

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Ser Phe Ile Phe Phe Asn Lys Val Glu Ile Val Gly Met Leu Gln Glu
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Asp Glu Lys Phe Leu Thr Asp Leu Phe Ala Gln Leu Thr Asp Glu Ala
            100                 105                 110
Thr Asp Glu Glu Lys Arg Gln Glu Leu Val Asn Phe Leu Lys Glu Phe
        115                 120                 125
Cys Ala Phe Ser Gln Thr Leu Gln Pro Gln Asn Arg Asp Ala Phe Phe
    130                 135                 140
Lys Thr Leu Ser Asn Met Gly Ile Leu Pro Ala Leu Glu Val Ile Leu
145                 150                 155                 160
Gly Met Asp Asp Thr Gln Val Arg Ser Ala Ala Thr Asp Ile Phe Ser
                165                 170                 175
Tyr Leu Val Glu Tyr Asn Pro Ser Met Val Arg Glu Phe Val Met Gln
            180                 185                 190
Glu Ala Gln Gln Asn Asp Asp Val Ser Lys Lys Leu Thr Glu Gln Lys
        195                 200                 205
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<211> 1670
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (16)..(567)

<400> 12657
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gaaattaacc agctattgga tcgtagcttt aaagtttata tcaaaactgt tgtttgcact 420
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<210> 12658
<211> 184
<212> PRT
<213> Homo sapiens

<400> 12658

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			20					25					30		
Arg	His	Gly	Met	His	Val	Pro	Thr	Phe	Arg	Val	Gln	Asp	Tyr	Cys	Trp
		35					40					45			
Glu	Asp	His	Gly	Tyr	Ser	Leu	Val	Asn	Arg	Leu	Tyr	Pro	Asp	Val	Gly
	50					55					60				
Gln	Leu	Ile	Asp	Glu	Lys	Phe	His	Ile	Ala	Tyr	Asn	Leu	Thr	Tyr	Asn
65					70					75					80
Thr	Met	Ala	Met	His	Lys	Asp	Val	Asp	Thr	Ser	Met	Leu	Arg	Arg	Ala
				85					90					95	
Ile	Trp	Asn	Tyr	Ile	His	Cys	Met	Phe	Gly	Ile	Arg	Tyr	Asp	Asp	Tyr
			100					105					110		
Asp	Tyr	Gly	Glu	Ile	Asn	Gln	Leu	Leu	Asp	Arg	Ser	Phe	Lys	Val	Tyr
		115					120					125			
Ile	Lys	Thr	Val	Val	Cys	Thr	Pro	Glu	Lys	Val	Thr	Lys	Arg	Met	Tyr
	130					135					140				
Asp	Ser	Phe	Trp	Arg	Gln	Phe	Lys	His	Ser	Glu	Lys	Val	His	Val	Asn
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Leu	Leu	Leu	Ile	Glu	Ala	Arg	Met	Gln	Ala	Glu	Leu	Leu	Tyr	Ala	Leu
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<211> 2284
<212> DNA
<213> Homo sapiens

<400> 12659
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<210> 12666
<211> 340
<212> PRT
<213> Homo sapiens

<400> 12666
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Ile Trp Asp Ser Tyr Thr Thr Asn Lys Met His Ala Ile Pro Leu Arg
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Ala Cys Gly Gly Leu Asp Asn Ile Cys Ser Ile Tyr Asn Leu Lys Thr
115 120 125
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130 135 140
Tyr Leu Ser Cys Cys Arg Phe Leu Asp Asp Ser Gln Ile Val Thr Ser
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225                 230                 235                 240
Phe Ala Thr Gly Ser Asp Asp Ala Thr Cys Arg Leu Phe Asp Leu Arg
                245                 250                 255
Ala Asp Gln Glu Leu Leu Leu Tyr Ser His Asp Asn Ile Ile Cys Gly
            260                 265                 270
Ile Thr Ser Val Ala Phe Ser Lys Ser Gly Arg Leu Leu Leu Ala Gly
        275                 280                 285
Tyr Asp Asp Phe Asn Cys Asn Val Trp Asp Thr Leu Lys Gly Asp Arg
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Ala Gly Val Leu Ala Gly His Asp Asn Arg Val Ser Cys Leu Gly Val
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (280)..(966)

<400> 12667

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<210> 12668
<211> 229
<212> PRT
<213> Homo sapiens

<400> 12668

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Leu	Ala	Asn	Cys	Phe	Gln	Val	Glu	Ile	Pro	Lys	Ile	Asp	Val	Tyr	Leu
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Tyr	Glu	Val	Asp	Ile	Lys	Pro	Asp	Lys	Cys	Pro	Arg	Arg	Val	Asn	Arg
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Glu	Val	Val	Asp	Ser	Met	Val	Gln	His	Phe	Lys	Val	Thr	Ile	Phe	Gly
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Asp	Arg	Arg	Pro	Val	Tyr	Asp	Gly	Lys	Arg	Ser	Leu	Tyr	Thr	Ala	Asn
				85					90					95	
Pro	Leu	Pro	Val	Ala	Thr	Thr	Gly	Val	Asp	Leu	Asp	Val	Thr	Leu	Pro
			100					105					110		
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Pro	Val	Gly	Arg	Ser	Phe	Phe	Ser	Ala	Pro	Glu	Gly	Tyr	Asp	His	Pro
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EP 2 302 056 A2

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<210> 12669
<211> 2334
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (66)..(1145)

<400> 12669
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<211> 360
<212> PRT
<213> Homo sapiens

<400> 12670
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35 40 45
Ile Asp Ile Ser Gln Ser Arg Ser Trp Leu Thr Ser Ser Trp Asn Phe
50 55 60
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65 70 75 80
Trp Ser Ile Tyr Ser Trp Cys Gln Asn Cys Ile Thr Gln Ser Leu Glu
85 90 95
Val Leu Lys Asp Thr Ile Phe Pro Ser Arg Ile Cys His Arg Glu Leu
100 105 110
Tyr Ser Val Lys Gln Gln Phe Cys Ile Leu Glu Ser Lys Leu Cys Lys
115 120 125
Leu Gln Glu Ala Leu Lys Thr Ile Ser Glu Ser Ser Ser Cys Pro Ser
130 135 140
Cys Gly Gln Thr Cys His Met Ser Gly Lys Leu Thr Asn Val Pro Ala
145 150 155 160
Cys Val Leu Ile Thr Pro Gly Asp Ser Lys Ala Val Leu Pro Pro Thr
165 170 175
Leu Pro Gln Pro Ala Ser His Phe Pro Pro Pro Pro Pro Pro Pro Pro
180 185 190
Leu Pro Pro Pro Pro Pro Pro Leu Ala Pro Val Leu Leu Arg Lys Pro
195 200 205
Ser Leu Ala Lys Ala Leu Gln Ala Gly Pro Leu Lys Lys Asp Gly Pro
210 215 220
Met Gln Ile Thr Val Lys Asp Leu Leu Thr Val Lys Leu Lys Lys Thr
225 230 235 240
Gln Ser Leu Asp Glu Lys Arg Lys Leu Ile Pro Ser Pro Lys Ala Arg
245 250 255
Asn Pro Leu Val Thr Val Ser Asp Leu Gln His Val Thr Leu Lys Pro

US 2005/0260650 A1

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Asn Ser Lys Val Leu Ser Thr Arg Val Thr Asn Val Leu Ile Thr Pro
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    290                 295                 300
Glu Arg Arg Pro Gly Gly Thr Pro Leu Thr Asn Lys Glu Asn Met Glu
305                 310                 315                 320
Thr Gly Thr Gly Leu Thr Pro Val Met Thr Gln Ala Leu Arg Arg Lys
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Phe Gln Leu Ala His Pro Arg Ser Pro Thr Pro Thr Leu Pro Leu Ser
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<210> 12671
<211> 2192
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (85)..(1860)

<400> 12671

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<211> 592
<212> PRT
<213> Homo sapiens

<400> 12672

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Glu Ile Glu Lys Leu Lys Ala Glu Asn Asp Arg Leu Lys Ser Glu Ser
     50                  55                  60
Gln Gly Ser Gly Cys Ser Arg Ala Pro Ser Gln Val Ser Ile Ser Ala
 65                  70                  75                  80
Ser Pro Arg Gln Ser Met Gly Leu Ser Gln His Ser Leu Asn Leu Thr
                 85                  90                  95
Glu Ser Thr Ser Leu Asp Met Leu Leu Asp Asp Thr Gly Glu Cys Ser
            100                 105                 110
Ala Arg Lys Gly Gly Gly Arg His Val Lys Ile Val Val Ser Phe Gln
        115                 120                 125
Glu Glu Met Lys Trp Lys Glu Asp Ser Arg Pro His Leu Phe Leu Ile
    130                 135                 140
Gly Cys Ile Gly Val Ser Gly Lys Thr Lys Trp Asp Val Leu Asp Gly
145                 150                 155                 160
Val Val Arg Arg Leu Phe Lys Glu Tyr Ile Ile His Val Asp Pro Val
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Ser Gln Leu Gly Leu Asn Ser Asp Ser Val Leu Gly Tyr Ser Ile Gly
            180                 185                 190
Glu Ile Lys Arg Ser Asn Thr Ser Glu Thr Pro Glu Leu Leu Pro Cys
        195                 200                 205
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Leu Ala Glu Asn Ser Leu Asp Ser Leu Val Phe Glu Ser Leu Ile Pro
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245 250 255
Ile Ile Leu Ser Gly Pro Ser Gly Thr Gly Lys Thr Tyr Leu Ala Asn
260 265 270
Arg Leu Ser Glu Tyr Ile Val Leu Arg Glu Gly Arg Glu Leu Thr Asp
275 280 285
Gly Val Ile Ala Thr Phe Asn Val Asp His Lys Ser Ser Lys Glu Leu
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Arg Gln Tyr Leu Ser Asn Leu Ala Asp Gln Cys Asn Ser Glu Asn Asn
305 310 315 320
Ala Val Asp Met Pro Leu Val Ile Ile Leu Asp Asn Leu His His Val
325 330 335
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Lys Cys Pro Tyr Ile Ile Gly Thr Met Asn Gln Ala Thr Ser Ser Thr
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Pro Asn Leu Gln Leu His His Asn Phe Arg Trp Val Leu Cys Ala Asn
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His Thr Glu Pro Val Lys Gly Phe Leu Gly Arg Phe Leu Arg Arg Glu
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Lys Ile Ile Asp Trp Ile Pro Lys Val Trp His His Leu Asn Arg Phe
420 425 430
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435 440 445
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450 455 460
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465 470 475 480
Gly Leu Gln Leu Tyr Gly Arg Arg Ala Pro Trp Glu Asp Pro Ala Lys
485 490 495
Trp Val Met Asp Thr Tyr Pro Trp Ala Ala Ser Pro Gln Gln His Glu
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Trp Pro Pro Leu Leu Gln Leu Arg Pro Glu Asp Val Gly Phe Asp Gly
515 520 525
Tyr Ser Met Pro Arg Glu Gly Ser Thr Ser Lys Gln Met Pro Pro Ser
530 535 540
Asp Ala Glu Gly Asp Pro Leu Met Asn Met Leu Met Arg Leu Gln Glu
545 550 555 560
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Asn Ser His His Asp Asp Ile Leu Asp Ser Ser Leu Glu Ser Thr Leu
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0950450-070800

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<211> 2226
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (115)..(801)

<400> 12673
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Gly Gln Phe Met His Ile Cys Asp Ile Ile Asn Thr Thr Gln Asp Gly
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Pro Lys Asp Ala Val Lys Ala Leu Lys Lys Arg Ile Ser Lys Asn Tyr
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Asn His Lys Glu Ile Gln Leu Thr Leu Ser Leu Ile Asp Met Cys Val
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Gln Asn Cys Gly Pro Ser Phe Gln Ser Leu Ile Val Lys Lys Glu Phe
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Val Lys Glu Asn Leu Val Lys Leu Leu Asn Pro Arg Tyr Asn Leu Pro
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Asp Leu Val Lys Lys Gly Val Gln Phe Pro Pro Ser Glu Ala Glu Ala
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Glu Thr Ala Arg Gln Glu Thr Ala Gln Ile Ser Ser Asn Pro Pro Thr
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65 70 75 80
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Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
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<400> 12679

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Cys Phe Arg Val Glu Glu Val Asn Trp Ala Ser Trp Glu Gln Thr Leu
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<212> PRT
<213> Homo sapiens

<400> 12682
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Arg Ala Ser Pro Ala Gln Ala Ser Pro Ala Gln Ala Ser Pro Ala Gly
35 40 45
Thr Pro Pro Gly Arg Ala Ser Pro Ala Gln Ala Ser Pro Ala Gly Thr
50 55 60
Pro Pro Gly Arg Ala Ser Pro Gly Arg Ala Ser Pro Ala Gln Ala Ser
65 70 75 80
Pro Ala Gln Ala Ser Pro Ala Arg Ala Ser Pro Ala Leu Ala Ser Leu
85 90 95
Ser Arg Ser Ser Ser Gly Arg Ser Ser Ser Ala Arg Ser Ala Ser Val
100 105 110
Thr Thr Ser Pro Thr Arg Val Tyr Leu Val Arg Ala Thr Pro Val Gly
115 120 125
Ala Val Pro Ile Arg Ser Ser Pro Ala Arg Ser Ala Pro Ala Thr Arg
130 135 140
Ala Thr Arg Glu Ser Pro Gly Thr Ser Leu Pro Lys Phe Thr Trp Arg
145 150 155 160
Glu Gly Gln Lys Gln Leu Pro Leu Ile Gly Cys Val Leu Leu Leu Ile
165 170 175
Ala Leu Val Val Ser Leu Ile Ile Leu Phe Gln Phe Trp Gln Gly His
180 185 190
Thr Gly Ile Arg Tyr Lys Glu Gln Arg Glu Ser Cys Pro Lys His Ala

0050150-0050150

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Gly Ser Ser His Gln Trp Leu Pro Ile Cys Ser Ser Asn Trp Asn Asp
                245                 250                 255
Ser Tyr Ser Glu Lys Thr Cys Gln Gln Leu Gly Phe Glu Ser Ala His
            260                 265                 270
Arg Thr Thr Glu Val Ala His Arg Asp Phe Ala Asn Ser Phe Ser Ile
        275                 280                 285
Leu Arg Tyr Asn Ser Thr Ile Gln Glu Ser Leu His Arg Ser Glu Cys
    290                 295                 300
Pro Ser Gln Arg Tyr Ile Ser Leu Gln Cys Ser His Cys Gly Leu Arg
305                 310                 315                 320
Ala Met Thr Gly Arg Ile Val Gly Gly Ala Leu Ala Ser Asp Ser Lys
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Trp Pro Trp Gln Val Ser Leu His Phe Gly Thr Thr His Ile Cys Gly
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Gly Thr Leu Ile Asp Ala Gln Trp Val Leu Thr Ala Ala His Cys Phe
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Phe Val Thr Arg Glu Lys Val Leu Glu Gly Trp Lys Val Tyr Ala Gly
    370                 375                 380
Thr Ser Asn Leu His Gln Leu Pro Glu Ala Ala Ser Ile Ala Glu Ile
385                 390                 395                 400
Ile Ile Asn Ser Asn Tyr Thr Asp Glu Glu Asp Asp Tyr Asp Ile Ala
                405                 410                 415
Leu Met Arg Leu Ser Lys Pro Leu Thr Leu Ser Gly Glu Gly Ile Cys
            420                 425                 430
Thr Pro Arg Ser Pro Ala Pro Gln Pro Gln His Pro Leu Gln Pro Ser
        435                 440                 445
His Leu Ser Ala Ser Val Asn Ser Tyr Pro Gly Pro Lys Ala Ser Ala
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Gly Gln Lys Ser Lys Thr Leu Lys Asp Pro Tyr Met Glu His Phe Cys
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (135)..(458)

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0002370-050204

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<211> 108
<212> PRT
<213> Homo sapiens

<400> 12684
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Asn Thr Glu Ala Gly Leu Ser Asp Glu Glu Thr Ser Lys Ser Ser Leu
35 40 45
Glu Asp Asn Leu Ala Gly Glu Glu Ser Pro Gln Gln Gly Ala Glu Ala
50 55 60
Lys Ala Pro Leu Asn Met Gly Glu Phe Pro Ser Ser Ser Glu Ser Thr
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (60)..(668)

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09/05/2005 - 09:53:08

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<212> PRT
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<400> 12686
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Gln Asp Gly Lys Ala Gly Leu Phe Ser Gln Glu Gln Tyr Glu Arg Asn
35 40 45
Lys Ser Ser Ser Ser Ser Ser Phe Ser Ser Ser Ser Ser Ser Ser Ser Ser
50 55 60
Ser Ser Ser Ser Ser Ser Gly Pro Gly His Gly Glu Pro Asp Val Leu
65 70 75 80
Lys Asp Glu Leu Gln Leu Tyr Gly Asp Ala Pro Gly Glu Val Val Pro
85 90 95
Ser Gly Glu Ser Gly Leu Arg Arg Arg Gly Ser Asp Pro Ala Ser Gly
100 105 110
Glu Val Glu Ala Ser Gln Leu Arg Arg Leu Asn Ile Lys Lys Asp Asp
115 120 125
Glu Phe Phe His Phe Val Leu Leu Cys Phe Ala Ile Gly Ala Leu Leu
130 135 140
Val Cys Tyr His Tyr Tyr Ala Asp Trp Phe Met Ser Leu Gly Val Gly
145 150 155 160
Leu Leu Thr Phe Ala Ser Leu Glu Thr Val Gly Ile Tyr Phe Gly Leu
165 170 175
Val Tyr Arg Ile His Ser Val Leu Gln Gly Phe Ile Pro Leu Phe Gln
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Lys Phe Arg Leu Thr Gly Phe Arg Lys Thr Asp
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<210> 12687
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS

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0050205.0050205

<222> (279)..(2069)

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<211> 597
<212> PRT
<213> Homo sapiens

<400> 12688

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    50                  55                  60
Pro Ser Leu Arg Pro Ala Ser Pro Thr Asn Ala Pro Ala His Gly Arg
65                  70                  75                  80
Gly Ser Asp Cys Thr Ala Lys Glu Pro Pro Leu Ala Asn Val Cys Arg
                85                  90                  95
Gln Asn Tyr Gly Ala Ala Gln Asp Pro Val Glu Leu Ala Gly Arg Arg
            100                 105                 110
Ser Ala Ser His Val Thr Gly Ser Ser Leu Gly Lys Ala Glu Val Ala
        115                 120                 125
Cys Gly Arg Arg Trp Arg Trp Ala Glu Leu Leu Ala Asp Thr Ser Trp
    130                 135                 140
Ser Pro Ala Gly Arg Ala Thr Glu Met Lys Val Lys Met Leu Ser Arg
145                 150                 155                 160
Asn Pro Asp Asn Tyr Val Arg Glu Thr Lys Leu Asp Leu Gln Arg Val
                165                 170                 175
Pro Arg Asn Tyr Asp Pro Ala Leu His Pro Phe Glu Val Pro Arg Glu
            180                 185                 190
Tyr Val Arg Ala Leu Asn Ala Thr Lys Leu Glu Arg Val Phe Ala Lys
        195                 200                 205
Pro Phe Leu Ala Ser Leu Asp Gly His Arg Asp Gly Val Asn Cys Leu
    210                 215                 220
Ala Lys His Pro Glu Lys Leu Ala Thr Val Leu Ser Gly Ala Cys Asp
225                 230                 235                 240
Gly Glu Val Arg Ile Trp Asn Leu Thr Gln Arg Asn Cys Ile Arg Thr
                245                 250                 255
Ile Gln Ala His Glu Gly Phe Val Arg Gly Ile Cys Thr Arg Phe Cys
            260                 265                 270
Gly Thr Ser Phe Phe Thr Val Gly Asp Asp Lys Thr Val Lys Gln Trp
        275                 280                 285
Lys Met Asp Gly Pro Gly Tyr Gly Asp Glu Glu Glu Pro Leu His Thr
    290                 295                 300
Ile Leu Gly Lys Thr Val Tyr Thr Gly Ile Asp His His Trp Lys Glu
305                 310                 315                 320
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            340                 345                 350
Ser Val Lys Phe Asn Pro Ile Glu Thr Phe Leu Leu Gly Ser Cys Ala
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Ser Asp Arg Asn Ile Val Leu Tyr Asp Met Arg Gln Ala Thr Pro Leu
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0950450-0950800

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                405                 410                 415
Thr Phe Asp Met Arg Ala Leu Asp Thr Pro Val Met Val His Met Asp
            420                 425                 430
His Val Ser Ala Val Leu Asp Val Asp Tyr Ser Pro Thr Gly Lys Glu
        435                 440                 445
Phe Val Ser Ala Ser Phe Asp Lys Ser Ile Arg Ile Phe Pro Val Asp
    450                 455                 460
Lys Ser Arg Ser Arg Glu Val Tyr His Thr Lys Arg Met Gln His Val
465                 470                 475                 480
Ile Cys Val Lys Trp Thr Ser Asp Ser Lys Tyr Ile Met Cys Gly Ser
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Asp Glu Met Asn Ile Arg Leu Trp Lys Ala Asn Ala Ser Glu Lys Leu
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Gly Val Leu Thr Ser Arg Glu Lys Ala Ala Lys Asp Tyr Asn Gln Lys
        515                 520                 525
Leu Lys Glu Lys Phe Gln His Tyr Pro His Ile Lys Arg Ile Ala Arg
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His Arg His Leu Pro Lys Ser Ile Tyr Ser Gln Ile Gln Glu Gln Arg
545                 550                 555                 560
Ile Met Lys Glu Ala Arg Arg Arg Lys Glu Val Asn Arg Ile Lys His
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (321)..(1145)

<400> 12689
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<212> PRT
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<400> 12690

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Glu Pro Tyr Tyr Leu Leu Leu Pro Arg Val Ser Tyr Leu Thr Leu Val
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Thr Asp Lys Val Lys Lys His Phe Gln Lys Val Met Arg Gln Glu Asp
     50                  55                  60
Ile Ser Glu Ile Trp Phe Glu Tyr Glu Gly Thr Pro Leu Lys Trp His
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Tyr Pro Ile Gly Leu Leu Phe Asp Leu Leu Ala Ser Ser Ser Ala Leu
                 85                  90                  95
Pro Trp Asn Ile Thr Val His Phe Lys Ser Phe Pro Glu Lys Asp Leu
            100                 105                 110
Leu His Cys Pro Ser Lys Asp Ala Ile Glu Ala His Phe Met Ser Cys
        115                 120                 125
Met Lys Glu Ala Asp Ala Leu Lys His Lys Ser Gln Val Ile Asn Glu
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09/05/2003 09:45:00

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Ala Glu Glu Asn Gly Phe Arg Tyr Ile Pro Phe Arg Ile Tyr Gln Thr
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Thr Thr Glu Arg Pro Phe Ile Gln Lys Leu Phe Arg Pro Val Ala Ala
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Asp Gly Gln Leu His Thr Leu Gly Asp Leu Leu Lys Glu Val Cys Pro
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Ser Ala Ile Asp Pro Glu Asp Gly Glu Lys Lys Asn Gln Val Met Ile
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His Gly Ile Glu Pro Met Leu Glu Thr Pro Leu Gln Trp Leu Ser Gly
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                165                 170                 175
Pro Gln Asp Glu Lys Ala Glu Gly Leu Ile Asn Val Ser Asn Tyr Ser
            180                 185                 190
Leu Glu Ser Gly His Asp Gln Lys Lys Lys Tyr Val Phe Gln Leu Thr
        195                 200                 205
His Asp Val Tyr Lys Pro Phe Ile Phe Ala Ala Asp Thr Leu Thr Asp
    210                 215                 220
Leu Ser Met Trp Val Arg His Leu Ile Thr Cys Ile Ser Lys Tyr Gln
225                 230                 235                 240
Ser Pro Gly Arg Ala Pro Pro Pro Arg Glu Glu Asp Cys Tyr Ser Glu
                245                 250                 255
Thr Glu Ala Glu Asp Pro Asp Asp Glu Ala Gly Ser His Ser Ala Ser
            260                 265                 270
Pro Ser Pro Ala Gln Ala Gly Ser Pro Leu His Gly Asp Thr Ser Pro
        275                 280                 285
Ala Ala Thr Pro Thr Gln Arg Ser Pro Arg Thr Ser Phe Gly Ser Leu
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Thr Asp Ser Ser Glu Glu Ala Leu Glu Gly Met Val Arg Gly Leu Arg
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Gln Gly Gly Val Ser Leu Leu Gly Gln Pro Gln Pro Leu Thr Gln Glu
                325                 330                 335
Gln Trp Arg Ser Ser Phe Met Arg Arg Asn Arg Asp Pro Gln Leu Asn
            340                 345                 350
Glu Arg Val His Arg Val Arg Ala Leu Gln Ser Thr Leu Lys Ala Lys
        355                 360                 365
Leu Gln Glu Leu Gln Val Leu Glu Glu Val Leu Gly Asp Pro Glu Leu
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Thr Gly Glu Lys Phe Arg Gln Trp Lys Glu Gln Asn Arg Glu Leu Tyr
385                 390                 395                 400
Ser Glu Gly Leu Gly Ala Trp Gly Val Ala Gln Ala Gly Gly Ser Ser
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His Ile Leu Thr Ser Asp Ser Thr Glu Gln Ser Pro Asn Ser Leu Pro
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Gln Val Lys Phe Gly Gln Gln Asn Pro Arg Gln Val Ala Gln Ser Glu
    50                  55                  60
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65                  70                  75                  80
Leu Asn Glu Leu Phe Lys Pro Val Val Ala Ala Gln Lys Ile Ser Lys
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Arg Lys Cys Glu Lys Arg Ser Val Tyr Ile Asp Ala Arg Asp Glu Glu
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Val Val Asn Lys Lys His Gly Glu Ala Glu Lys Lys Lys Pro Lys Thr
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Gln Ile Val Cys Lys His Phe Leu Glu Ala Ile Glu Asn Asn Lys Tyr
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Gly Trp Phe Trp Val Cys Pro Gly Gly Gly Asp Ile Cys Met Tyr Arg
        195                 200                 205
His Ala Leu Pro Pro Gly Phe Val Leu Lys Lys Asp Lys Lys Lys Glu
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Glu Lys Glu Asp Glu Ile Ser Leu Glu Asp Leu Ile Glu Arg Glu Arg
225                 230                 235                 240
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                245                 250                 255
Ala Trp Lys Lys Arg Lys Arg Gln Glu Lys Ile Asp Lys Leu Glu Gln
            260                 265                 270
Asp Met Glu Arg Arg Lys Ala Asp Phe Lys Ala Gly Lys Ala Leu Val
        275                 280                 285
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Asp Asp Glu Glu Ala Asp Asp Thr Arg Tyr Thr Gln Gly Thr Gly Gly
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Asp Glu Val Asp Asp Ser Val Ser Val Asn Asp Ile Asp Leu Ser Leu
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Glu Arg Phe Ser Thr Tyr Thr Ser Asp Lys Asp Glu Asn Lys Leu Ser
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<400> 12696

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Asn	Val	Val	Arg	Lys	His	Ile	Ser	Asp	Gly	Val	Ala	Asp	Ser	Gly	Leu
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Thr	Leu	Lys	Gly	Phe	Leu	Phe	Leu	His	Thr	Leu	Phe	Ile	Gln	Arg	Gly
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Pro	Asp	Cys	Thr	Thr	Glu	Leu	Asn	His	His	Ala	Tyr	Leu	Phe	Leu	Gln
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Ser	Thr	Phe	Asp	Lys	His	Asp	Leu	Asp	Arg	Asp	Cys	Ala	Leu	Ser	Pro
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Val Ile Gly Val Lys Asn Cys Gly Lys Ser Gly Val Leu Gln Ala Leu
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<400> 12697

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Val Ala Phe Gln Ala Met Gly Ala Met Lys Leu Gly Leu Thr Ile Ala
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Ile Arg Tyr Ser His Ser Arg Arg Gln Phe Gly Pro Lys Thr Lys Glu
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09/25/2003 09:45 FAX

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Ser Glu Phe Gln Glu Lys Ile Leu Glu Pro Arg Thr Thr Arg Gly Tyr
    210                 215                 220
Lys Pro Pro Ala Ile Pro Asn Met Asn Val Phe Glu Ala Thr Val Ser
225                 230                 235                 240
Cys Val Gly Asp Asp Gly Thr Ile Phe Val Val Pro Lys Leu Ser Glu
                245                 250                 255
Phe Glu Leu Ile Lys Met Thr Asn Glu Ile Gln Ser Asn Leu Lys Cys
            260                 265                 270
Leu Gly Leu Leu Glu Pro Tyr Phe Trp Lys Lys Gly Glu Ala Cys Ala
        275                 280                 285
Val Arg Gly Ser Asp Thr Leu Trp Tyr Arg Gly Lys Val Met Glu Val
    290                 295                 300
Val Gly Gly Ala Val Arg Val Gln Tyr Leu Asp His Gly Phe Thr Glu
305                 310                 315                 320
Lys Ile Pro Gln Cys His Leu Tyr Pro Ile Leu Leu Tyr Pro Asp Ile
                325                 330                 335
Pro Gln Phe Cys Ile Pro Cys Gln Leu His Asn Thr Thr Pro Val Gly
            340                 345                 350
Asn Val Trp Gln Pro Asp Ala Ile Glu Val Leu Gln Gln Leu Leu Ser
        355                 360                 365
Lys Arg Gln Val Asp Ile His Ile Met Lys Pro Arg Ser Asp His Asp
    370                 375                 380
Lys Lys Tyr Glu Glu Lys Gln Trp Glu Ile Arg Phe Glu Glu Leu Leu
385                 390                 395                 400
Ser Ala Glu Thr Asp Thr Pro Leu Leu Pro Pro Tyr Leu Ser Ser Ser
                405                 410                 415
Leu Pro Ser Pro Gly Glu Leu Tyr Ala Val Gln Val Lys His Val Val
            420                 425                 430
Ser Pro Asn Glu Val Tyr Ile Cys Leu Asp Ser Ile Glu Thr Ser Asn
        435                 440                 445
Gln Ser Asn Gln His Ser Asp Thr Asp Asp Ser Gly Val Ser Gly Glu
    450                 455                 460
Ser Glu Ser Glu Ser Leu Asp Glu Ala Leu Gln Arg Val Asn Lys Lys
465                 470                 475                 480
Val Glu Ala Leu Pro Pro Leu Thr Asp Phe Arg Thr Glu Met Pro Cys
                485                 490                 495
Leu Ala Glu Tyr Asp Asp Gly Leu Trp Tyr Arg Ala Lys Ile Val Ala
            500                 505                 510
Ile Lys Glu Phe Asn Pro Leu Ser Ile Leu Val Gln Phe Val Asp Tyr
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Gly Ser Thr Ala Lys Leu Thr Leu Asn Arg Leu Cys Gln Ile Pro Ser
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    530                 535                 540
His Leu Met Arg Tyr Pro Ala Arg Ala Ile Lys Val Leu Leu Ala Gly
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Phe Lys Pro Pro Leu Arg Asp Leu Gly Glu Thr Arg Ile Pro Tyr Cys
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Pro Lys Trp Ser Met Glu Ala Leu Trp Ala Met Ile Asp Cys Leu Gln
            580                 585                 590
Gly Lys Gln Leu Tyr Ala Val Ser Met Ala Pro Ala Pro Glu Gln Ile
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Val Thr Leu Tyr Asp Asp Glu Gln His Pro Val His Met Pro Leu Val
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Glu Met Gly Leu Ala Asp Lys Asp Glu
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<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (8)..(2059)

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<212> PRT
<213> Homo sapiens

<400> 12706

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         35                  40                  45
Leu Arg Ala Lys Val Trp Lys Ile Ala Leu Asn Val Ala Gly Lys Gly
     50                  55                  60
Asp Cys Leu Ala Ser Trp Asp Gly Ile Leu Asp Leu Pro Glu Gln Asn
 65                  70                  75                  80
Thr Ile His Lys Asp Cys Leu Gln Phe Ile Asp Gln Leu Ser Val Pro
                 85                  90                  95
Glu Glu Lys Ala Ala Glu Leu Leu Leu Asp Ile Glu Ser Val Ile Thr
            100                 105                 110
Phe Tyr Cys Lys Ser Arg Asn Ile Lys Tyr Ser Thr Ser Leu Ser Trp
        115                 120                 125
Ile His Leu Leu Lys Pro Leu Val His Leu Gln Leu Pro Arg Ser Asp
    130                 135                 140
Leu Tyr Asn Cys Phe Tyr Ala Ile Met Asn Lys Tyr Ile Pro Arg Asp
145                 150                 155                 160
Cys Ser Gln Lys Gly Arg Pro Phe His Pro Phe Arg Leu Leu Ile Gln
                165                 170                 175
Tyr His Glu Pro Glu Leu Cys Ser Tyr Leu Asp Thr Lys Lys Ile Thr
            180                 185                 190
Pro Asp Ser Tyr Ala Leu Asn Trp Leu Gly Ser Leu Phe Ala Cys Tyr
        195                 200                 205
Cys Ser Thr Glu Val Thr Gln Ala Ile Trp Asp Gly Tyr Leu Gln Gln
    210                 215                 220
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Ala Asp Pro Phe Phe Ile Tyr Phe Leu Met Leu Ile Ile Leu Val Asn
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245 250 255
Ile Lys Phe Leu Glu Asn Thr Pro Ser Ser Leu Asn Ile Glu Asp Ile
260 265 270
Glu Asp Leu Phe Ser Leu Ala Gln Tyr Tyr Cys Ser Lys Thr Pro Ala
275 280 285
Ser Phe Arg Lys Asp Asn His His Leu Phe Gly Ser Thr Leu Leu Gly
290 295 300
Ile Lys Asp Asp Asp Ala Asp Leu Ser Gln Ala Leu Cys Leu Ala Ile
305 310 315 320
Ser Val Ser Glu Ile Leu Gln Ala Asn Gln Leu Gln Gly Glu Gly Val
325 330 335
Arg Phe Phe Val Val Asp Cys Arg Pro Ala Glu Gln Tyr Asn Ala Gly
340 345 350
His Leu Ser Thr Ala Phe His Ser Asp Ser Asp Leu Met Leu Gln Asn
355 360 365
Pro Ser Glu Phe Ala Gln Ser Val Lys Ser Leu Leu Glu Ala Gln Lys
370 375 380
Gln Ser Ile Glu Ser Gly Ser Ile Ala Gly Gly Glu His Leu Cys Phe
385 390 395 400
Met Gly Ser Gly Arg Glu Glu Glu Asp Met Tyr Met Asn Met Val Leu
405 410 415
Ala His Phe Leu Gln Lys Asn Lys Glu Tyr Val Ser Ile Ala Ser Gly
420 425 430
Gly Phe Met Ala Leu Gln Gln His Leu Ala Asp Ile Asn Val Asp Gly
435 440 445
Pro Glu Asn Gly Tyr Gly His Trp Ile Ala Ser Thr Ser Gly Ser Arg
450 455 460
Ser Ser Ile Asn Ser Val Asp Gly Glu Ser Pro Asn Gly Ser Ser Asp
465 470 475 480
Arg Gly Met Lys Ser Leu Val Asn Lys Met Thr Val Ala Leu Lys Thr
485 490 495
Lys Ser Val Asn Val Arg Glu Lys Val Ile Ser Phe Ile Glu Asn Thr
500 505 510
Ser Thr Pro Val Asp Arg His Val Ser Ser Ser Asp Arg Val Gly Lys
515 520 525
Pro Tyr Arg Gly Val Lys Pro Val Phe Ser Ile Gly Asp Glu Glu Glu
530 535 540
Tyr Asp Thr Asp Glu Ile Asp Ser Ser Ser Met Ser Asp Asp Asp Arg
545 550 555 560
Lys Glu Val Val Asn Ile Gln Thr Trp Ile Asn Lys Pro Asp Val Lys
565 570 575
His His Phe Pro Cys Lys Glu Val Lys Glu Ser Gly His Met Phe Pro
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Ser His Leu Leu Val Thr Ala Thr His Met Tyr Cys Leu Arg Glu Ile
595 600 605

0950456-0050800

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625                 630                 635                 640
Phe Lys Tyr Gly Asn Ser Ser Ala Ser Gly Ile Glu Ile Leu Ala Ile
                645                 650                 655
Glu Arg Tyr Leu Ile Pro Asn Ala Gly Asp Ala Thr Lys Ala Ile Lys
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<212> DNA
<213> Homo sapiens

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<211> 271
<212> PRT
<213> Homo sapiens

<400> 12708

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Thr	Ser	His	Asp	Trp	Arg	Leu	Arg	Cys	Gly	Ala	Val	Asp	Leu	Tyr	Phe
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Thr	Leu	Phe	Gly	Leu	Ser	Arg	Pro	Ser	Cys	Leu	Pro	Leu	Pro	Glu	Leu
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Ile	Ile	Pro	Glu	Ser	Val	Ala	Gly	Asn	Gln	Glu	Ala	Ala	Asn	Asn	Pro
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Ser	Ser	His	Pro	Gln	Leu	Val	Gly	Phe	Gln	Asn	Pro	Phe	Ser	Ser	Ser
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Phe	Ile	Ser	His	His	Leu	Asn	Met	Leu	Glu	Arg	Pro	Ser	Thr	Pro	Gly
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Leu	Ser	Lys	Tyr	Arg	Pro	Ala	Ser	Ser	Arg	Ser	Ala	Leu	Ile	Pro	Gln
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His	Ser	Ala	Gly	Cys	Asp	Ser	Thr	Pro	Thr	Thr	Lys	Pro	Gln	Trp	Ser
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Leu	Glu	Leu	Ala	Arg	Lys	Gly	Thr	Gly	Lys	Glu	Gln	Ala	Pro	Leu	Glu
			180					185					190		
Met	Ser	Met	His	Pro	Ala	Ala	Ser	Ala	Pro	Leu	Ser	Val	Phe	Thr	Lys
		195					200					205			
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Glu	His	Lys	Lys	Lys	Lys	Lys	Lys	His	Lys	His	Lys	His	Lys	His	Lys
225					230					235					240
His	Lys	His	Asp	Ser	Lys	Glu	Lys	Asp	Lys	Glu	Pro	Phe	Thr	Phe	Ser
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260 265 270

<210> 12709
<211> 1996
<212> DNA
<213> Homo sapiens

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<211> 2475
<212> DNA

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<213> Homo sapiens

<400> 12710

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09/25/2003 09:45:56

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09/529,603

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<212> PRT
<213> Homo sapiens

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Arg Lys His Val His Gln Ile Asp Ala Val Leu Leu Ser His Pro Asp
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Pro Leu His Leu Gly Ala Leu Pro Tyr Ala Val Gly Lys Leu Gly Leu
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Phe Met Tyr Asp Leu Tyr Gln Ser Arg His Asn Thr Glu Asp Phe Thr
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Gln Val Glu Trp Met Ser Asp Lys Leu Met Arg Cys Phe Glu Asp Lys
145 150 155 160
Arg Asn Asn Pro Phe Gln Phe Arg His Leu Ser Leu Cys His Gly Leu
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Ser Asp Leu Ala Arg Val Pro Ser Pro Lys Val Val Leu Ala Ser Gln
180 185 190
Pro Asp Leu Glu Cys Gly Phe Ser Arg Asp Leu Phe Ile Gln Trp Cys
195 200 205
Gln Asp Pro Lys Asn Ser Ile Ile Leu Thr Tyr Arg Thr Thr Pro Gly
210 215 220
Thr Leu Ala Arg Phe Leu Ile Asp Asn Pro Ser Glu Lys Ile Thr Glu
225 230 235 240
Ile Glu Leu Arg Lys Arg Val Lys Leu Glu Gly Lys Glu Leu Glu Glu
245 250 255
Tyr Leu Glu Lys Glu Lys Leu Lys Lys Glu Ala Ala Lys Lys Leu Glu
260 265 270
Gln Ser Lys Glu Ala Asp Ile Asp Ser Ser Asp Glu Ser Asp Ile Glu
275 280 285
Glu Asp Ile Asp Gln Pro Ser Ala His Lys Thr Lys His Asp Leu Met
290 295 300
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Gln Ala Thr Glu Glu Glu Lys Ser Lys Leu Glu Ser Gly Leu Thr Asn
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Gly Asp Glu Pro Met Asp Gln Asp Leu Ser Asp Val Pro Thr Lys Cys
    370                 375                 380
Ile Ser Thr Thr Glu Ser Ile Glu Ile Lys Ala Arg Val Thr Tyr Ile
385                 390                 395                 400
Asp Tyr Glu Gly Arg Ser Asp Gly Asp Ser Ile Lys Lys Ile Ile Asn
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Gln Met Lys Pro Arg Gln Leu Ile Ile Val His Gly Pro Pro Glu Ala
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Ser Gln Asp Leu Ala Glu Cys Cys Arg Ala Phe Gly Gly Lys Asp Ile
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Lys Val Tyr Met Pro Lys Leu His Glu Thr Val Asp Ala Thr Ser Glu
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Thr His Ile Tyr Gln Val Arg Leu Lys Asp Ser Leu Val Ser Ser Leu
465                 470                 475                 480
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Phe Gly Asp Asp Glu Lys Glu Thr Gly Glu Glu Ser Glu Ile Ile Pro
545                 550                 555                 560
Thr Leu Glu Pro Leu Pro Pro His Glu Val Pro Gly His Gln Ser Val
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Phe Met Asn Glu Pro Arg Leu Ser Asp Phe Lys Gln Val Leu Leu Arg
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Glu Gly Ile Gln Ala Glu Phe Val Gly Gly Val Leu Val Cys Asn Asn
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Gln Val Ala Val Arg Arg Thr Glu Thr Gly Arg Ile Gly Leu Glu Gly
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<212> DNA

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<213> Homo sapiens

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<213> Homo sapiens

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Leu Pro Leu Val Thr Ser Gly Asp Glu Glu Glu Lys Asp Tyr Lys
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Gly Pro Asn Pro Arg Glu Leu Leu Glu Pro Leu Phe Lys Gln Ser Ser
            100                 105                 110
Cys Ser Tyr Arg Ile Glu Ser Tyr Trp Thr Tyr Glu Val Cys His Gly
        115                 120                 125
Lys His Ile Arg Gln Tyr His Glu Glu Lys Glu Thr Gly Gln Lys Ile
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Asn Ile His Glu Tyr Tyr Leu Gly Asn Met Leu Ala Lys Asn Leu Leu
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Phe Glu Lys Glu Arg Glu Ala Glu Glu Lys Glu Lys Ser Asn Glu Ile
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Thr Leu Arg Gln Leu Glu Gln Gln Glu Glu Ile Leu Arg Val Pro Phe
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Pro Ala Ile His Lys Ser Ile Ala Ile Gly Ser Gln Pro Val Leu Thr
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Val Gly Thr Thr His Ile Ser Lys Leu Thr Gly Asp Gln Leu Ile Lys
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Glu Phe Leu Ser Gly Ser Tyr Cys Phe Arg Gly Gly Val Gly Trp Trp
            340                 345                 350
Lys Tyr Glu Phe Cys Tyr Gly Lys His Val His Gln Tyr His Glu Asp
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Lys Asp Ser Gly Lys Thr Ser Val Val Val Gly Thr Trp Asn Gln Glu
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Glu His Ile Glu Trp Ala Lys Glu Asn Thr Ala Arg Ala Tyr His Leu
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Gln Asp Asp Gly Thr Gln Thr Val Arg Met Val Ser His Phe Tyr Gly
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Asn Gly Asp Ile Cys Asp Ile Thr Asp Lys Pro Arg Gln Val Thr Val
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Lys Leu Lys Cys Lys Glu Ser Asp Ser Pro His Ala Val Thr Val Tyr
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Met Leu Glu Pro His Ser Cys Gln Tyr Ile Leu Gly Val Glu Ser Pro
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<213> Homo sapiens

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<222> (93)..(1349)

<400> 12715

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<212> PRT
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<400> 12716

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Cys	Val	Val	Thr	Glu	Gly	Val	Leu	Thr	Thr	Thr	Phe	Ser	Asp	Glu	Gly
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Gln Ser Leu Val Arg Ser Ala Phe Arg Asp Gly Thr Ala Glu Val Glu
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Thr Arg Glu Lys Glu Pro Pro Gly Trp Gly Gln Gly Gln Gly Glu Gly
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Glu Val Gly Asn Asn Ser Leu Gly Leu Pro Gln Gly Lys Arg Pro Ala
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Ser Pro Ala Leu Leu Leu Pro Pro Cys Met Leu Lys Ser Pro Lys Arg
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Ile Cys Pro Val Pro Pro Val Ser Thr Val Thr Gly Asp Glu Asn Ile
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<212> DNA
<213> Homo sapiens

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<222> (103)..(1719)

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tactatgttc cctatttggg tgatgggttc gttagaagtc caaacctcag cagcacacaa 1920
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<210> 12718
<211> 539
<212> PRT
<213> Homo sapiens

<400> 12718

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			20					25				30			
Gly	Ile	Ser	Ala	Arg	Val	Trp	Gly	His	Phe	Pro	Lys	Trp	Leu	Asn	Gly
		35					40					45			
Ser	Leu	Leu	Arg	Ile	Gly	Pro	Gly	Lys	Phe	Glu	Phe	Gly	Lys	Asp	Lys
	50					55					60				
Tyr	Asn	His	Trp	Phe	Asp	Gly	Met	Ala	Leu	Leu	His	Gln	Phe	Arg	Met
65					70					75					80
Ala	Lys	Gly	Thr	Val	Thr	Tyr	Arg	Ser	Lys	Phe	Leu	Gln	Ser	Asp	Thr
				85					90					95	
Tyr	Lys	Ala	Asn	Ser	Ala	Lys	Asn	Arg	Ile	Val	Ile	Ser	Glu	Phe	Gly
			100					105					110		
Thr	Leu	Ala	Leu	Pro	Asp	Pro	Cys	Lys	Asn	Val	Phe	Glu	Arg	Phe	Met
		115					120					125			
Ser	Arg	Phe	Glu	Leu	Pro	Gly	Lys	Ala	Ala	Ala	Met	Thr	Asp	Asn	Thr
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Pro His Tyr Asp Pro Asp Gly Thr Ala Tyr Asn Met Gly Asn Ser Phe
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Gly Pro Tyr Gly Phe Ser Tyr Lys Val Ile Arg Val Pro Pro Glu Lys
    210                 215                 220
Val Asp Leu Gly Glu Thr Ile His Gly Val Gln Val Ile Cys Ser Ile
225                 230                 235                 240
Ala Ser Thr Glu Lys Gly Lys Pro Ser Tyr Tyr His Ser Phe Gly Met
                245                 250                 255
Thr Arg Asn Tyr Ile Ile Phe Ile Glu Gln Pro Leu Lys Met Asn Leu
            260                 265                 270
Trp Lys Ile Ala Thr Ser Lys Ile Arg Gly Lys Ala Phe Ser Asp Gly
        275                 280                 285
Ile Ser Trp Glu Pro Gln Cys Asn Thr Arg Phe His Val Val Glu Lys
    290                 295                 300
Arg Thr Gly Gln Leu Leu Pro Gly Arg Tyr Tyr Ser Lys Pro Phe Val
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Thr Phe His Gln Ile Asn Ala Phe Glu Asp Gln Gly Cys Val Ile Ile
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Asp Leu Cys Cys Gln Asp Asn Gly Arg Thr Leu Glu Val Tyr Gln Leu
            340                 345                 350
Gln Asn Leu Arg Lys Ala Gly Glu Gly Leu Asp Gln Val His Asn Ser
        355                 360                 365
Ala Ala Lys Ser Phe Pro Arg Arg Phe Val Leu Pro Leu Asn Val Ser
    370                 375                 380
Leu Asn Ala Pro Glu Gly Asp Asn Leu Ser Pro Leu Ser Tyr Thr Ser
385                 390                 395                 400
Ala Ser Ala Val Lys Gln Ala Asp Gly Thr Ile Trp Cys Ser His Glu
                405                 410                 415
Asn Leu His Gln Glu Asp Leu Glu Lys Glu Gly Gly Ile Glu Phe Pro
            420                 425                 430
Gln Ile Tyr Tyr Asp Arg Phe Ser Gly Lys Lys Tyr His Phe Phe Tyr
        435                 440                 445
Gly Cys Gly Phe Arg His Leu Val Gly Asp Ser Leu Ile Lys Val Asp
    450                 455                 460
Val Val Trp Arg Glu Asp Gly Phe Tyr Pro Ser Glu Pro Val Phe Val
465                 470                 475                 480
Pro Ala Pro Gly Thr Asn Glu Glu Asp Gly Gly Val Ile Leu Ser Val
                485                 490                 495
Val Ile Thr Pro Asn Gln Asn Glu Ser Asn Phe Leu Leu Val Leu Asp
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Ala Lys Asn Phe Glu Glu Leu Gly Arg Ala Glu Val Pro Val Gln Met
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Pro Tyr Gly Phe His Gly Thr Phe Ile Pro Ile
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<211> 2187
<212> DNA
<213> Homo sapiens

<220>
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<222> (297)..(2186)

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tgctgcggaa actttcaaag aaagatgtca ccacaaaatt aaaagctatg caggaatttg 360
gaaccatgtg tacagagaga gacacagaaa ctgtgaaagg agttcttcca tattggccaa 420
gaatttttg caaaatttca cttgatcatg accgtcgcgt ccgagaagcc acacaacaag 480
cttttgaaaa acttaccctt aaagtaaaga aacagttggc tccctactta aaaagtttaa 540
tgggatattg gctaatggct cagtgtgata cttacacacc agctgcgttt gcagcaaaag 600
atgcatttga agcggctttt cctccaagca agcaacctga agccatagca ttttgtaagg 660
atgaaattac aagtgtgctg caggatcatc ttataaaaga aacacctgat acactcagtg 720
acccgcaaac tgttccagag gaagaaagag aagctaaatt ctaccgggtt gtaacttgtt 780
ccttattggc attaaagaga ttactttgcc ttttacctga taatgagctt gattctctgg 840
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<210> 12720
<211> 630
<212> PRT
<213> Homo sapiens

<400> 12720

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Val Lys Gly Val Leu Pro Tyr Trp Pro Arg Ile Phe Cys Lys Ile Ser
        35                  40                  45
Leu Asp His Asp Arg Arg Val Arg Glu Ala Thr Gln Gln Ala Phe Glu
    50                  55                  60
Lys Leu Thr Leu Lys Val Lys Lys Gln Leu Ala Pro Tyr Leu Lys Ser
65                  70                  75                  80
Leu Met Gly Tyr Trp Leu Met Ala Gln Cys Asp Thr Tyr Thr Pro Ala
                85                  90                  95
Ala Phe Ala Ala Lys Asp Ala Phe Glu Ala Ala Phe Pro Pro Ser Lys
            100                 105                 110
Gln Pro Glu Ala Ile Ala Phe Cys Lys Asp Glu Ile Thr Ser Val Leu
        115                 120                 125
Gln Asp His Leu Ile Lys Glu Thr Pro Asp Thr Leu Ser Asp Pro Gln
    130                 135                 140
Thr Val Pro Glu Glu Glu Arg Glu Ala Lys Phe Tyr Arg Val Val Thr
145                 150                 155                 160
Cys Ser Leu Leu Ala Leu Lys Arg Leu Leu Cys Leu Leu Pro Asp Asn
                165                 170                 175
Glu Leu Asp Ser Leu Glu Glu Lys Phe Lys Ser Leu Leu Ser Gln Asn
            180                 185                 190
Lys Phe Trp Lys Tyr Gly Lys His Ser Val Pro Gln Ile Arg Ser Ala
        195                 200                 205
Tyr Phe Glu Leu Val Ser Ala Leu Cys Gln Arg Ile Pro Gln Leu Met
    210                 215                 220
Lys Glu Glu Ala Ser Lys Val Ser Pro Ser Val Leu Leu Ser Ile Asp
225                 230                 235                 240
Asp Ser Asp Pro Ile Val Cys Pro Ala Leu Trp Glu Ala Val Leu Tyr
                245                 250                 255
Thr Leu Thr Thr Ile Glu Asp Cys Trp Leu His Val Asn Ala Lys Lys
            260                 265                 270
Ser Val Phe Pro Lys Leu Ser Thr Val Ile Arg Glu Gly Gly Arg Gly
        275                 280                 285
Leu Ala Thr Val Ile Tyr Pro Tyr Leu Leu Pro Phe Ile Ser Lys Leu
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Pro His Ser Ile Thr Asn Pro Lys Leu Asp Phe Phe Lys Asn Phe Leu
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Ser Glu Ser Ser Ala Val Ile Ser Ala Phe Tyr Glu Cys Leu Arg Phe
            340                 345                 350
Ile Met Gln Gln Asn Leu Gly Glu Glu Glu Ile Glu Gln Met Leu Val
        355                 360                 365
Asn Asp Gln Leu Ile Pro Phe Ile Asp Ala Val Leu Lys Asp Pro Gly
    370                 375                 380
Leu Gln His Gly Gln Leu Phe Asn His Leu Ala Glu Thr Leu Ser Ser
385                 390                 395                 400
Trp Glu Ala Lys Ala Asp Thr Glu Lys Asp Glu Lys Thr Ala His Asn
                405                 410                 415
Leu Glu Asn Val Leu Ile His Phe Trp Glu Arg Leu Ser Glu Ile Cys
            420                 425                 430
Val Ala Lys Ile Ser Glu Pro Glu Ala Asp Val Glu Ser Val Leu Gly
        435                 440                 445
Val Ser Asn Leu Leu Gln Val Leu Gln Lys Pro Lys Ser Ser Leu Lys
    450                 455                 460
Ser Ser Lys Lys Lys Asn Gly Lys Val Arg Phe Ala Asp Glu Ile Leu
465                 470                 475                 480
Glu Ser Asn Lys Glu Asn Glu Lys Cys Val Ser Ser Glu Gly Glu Lys
                485                 490                 495
Ile Glu Gly Trp Glu Leu Thr Thr Glu Pro Ser Leu Thr His Asn Ser
            500                 505                 510
Ser Gly Leu Leu Ser Pro Leu Arg Lys Lys Pro Leu Glu Asp Leu Val
        515                 520                 525
Cys Lys Leu Ala Asp Ile Ser Ile Asn Tyr Val Asn Glu Arg Lys Ser
    530                 535                 540
Glu Gln His Leu Arg Phe Leu Ser Thr Leu Leu Asp Ser Phe Ser Ser
545                 550                 555                 560
Ser Arg Val Phe Lys Met Leu Leu Gly Asp Glu Lys Gln Ser Ile Val
                565                 570                 575
Gln Ala Lys Pro Leu Glu Ile Ala Lys Leu Val Gln Lys Asn Pro Ala
            580                 585                 590
Val Gln Phe Leu Tyr Gln Lys Leu Ile Gly Trp Leu Asn Glu Asp Gln
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Arg Lys Asp Phe Gly Phe Leu Val Asp Ile Leu Tyr Ser Ala Leu Arg
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Cys Cys Asp Asn Asp Met
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<210> 12721
<211> 1878
<212> DNA
<213> Homo sapiens

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<220>
<221> CDS
<222> (22)..(900)

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gcatctgttg ctggctctgt ggagagagta aacaagttga tctgtgtgaa agctttgaaa 240
accagataca ttggtgaagt aggagacatc gtagtgggac gaatcacaga ggttcaacag 300
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<210> 12722
<211> 293
<212> PRT
<213> Homo sapiens

<400> 12722
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            35                  40                  45
Glu Glu Lys Leu Ile Ala Ser Val Ala Gly Ser Val Glu Arg Val Asn
        50                  55                  60
Lys Leu Ile Cys Val Lys Ala Leu Lys Thr Arg Tyr Ile Gly Glu Val
 65                  70                  75                  80
Gly Asp Ile Val Val Gly Arg Ile Thr Glu Val Gln Gln Lys Arg Trp
                85                  90                  95
Lys Val Glu Thr Asn Ser Arg Leu Asp Ser Val Leu Leu Leu Ser Ser
            100                 105                 110
Met Asn Leu Pro Gly Gly Glu Leu Arg Arg Arg Ser Ala Glu Asp Glu
        115                 120                 125
Leu Ala Met Arg Gly Phe Leu Gln Glu Gly Asp Leu Ile Ser Ala Glu
    130                 135                 140
Val Gln Ala Val Phe Ser Asp Gly Ala Val Ser Leu His Thr Arg Ser
145                 150                 155                 160
Leu Lys Tyr Gly Lys Leu Gly Gln Gly Val Leu Val Gln Val Ser Pro
                165                 170                 175
Ser Leu Val Lys Arg Gln Lys Thr His Phe His Asp Leu Pro Cys Gly
            180                 185                 190
Ala Ser Val Ile Leu Gly Asn Asn Gly Phe Ile Trp Ile Tyr Pro Thr
        195                 200                 205
Pro Glu His Lys Glu Glu Glu Ala Gly Gly Phe Ile Ala Asn Leu Glu
    210                 215                 220
Pro Val Ser Leu Ala Asp Arg Glu Val Ile Ser Arg Leu Arg Asn Cys
225                 230                 235                 240
Ile Ile Ser Leu Val Thr Gln Arg Met Met Leu Tyr Asp Thr Ser Ile
                245                 250                 255
Leu Tyr Cys Tyr Glu Ala Ser Leu Pro His Gln Ile Lys Asp Ile Leu
            260                 265                 270
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Leu Glu Gln Glu Gly
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<210> 12723
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
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<210> 12724
<211> 185
<212> PRT
<213> Homo sapiens

<400> 12724

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		20					25					30			
Lys	Asp	Arg	Ser	Gly	Val	Ile	Ser	Asp	Thr	Glu	Leu	Gln	Gln	Ala	Leu
	35					40					45				
Ser	Asn	Gly	Thr	Trp	Thr	Pro	Phe	Asn	Pro	Val	Thr	Val	Arg	Ser	Ile
50					55					60					
Ile	Ser	Met	Phe	Asp	Arg	Glu	Asn	Lys	Ala	Gly	Val	Asn	Phe	Ser	Glu
65				70					75					80	
Phe	Thr	Gly	Val	Trp	Lys	Tyr	Ile	Thr	Asp	Trp	Gln	Asn	Val	Phe	Arg
			85					90					95		
Thr	Tyr	Asp	Arg	Asp	Asn	Ser	Gly	Met	Ile	Asp	Lys	Asn	Glu	Leu	Lys
		100					105					110			
Gln	Ala	Leu	Ser	Gly	Tyr	Arg	Leu	Ser	Asp	Gln	Phe	His	Asp	Ile	Leu
	115					120					125				
Ile	Arg	Lys	Phe	Asp	Arg	Gln	Gly	Arg	Gly	Gln	Ile	Ala	Phe	Asp	Asp
130					135					140					
Phe	Ile	Gln	Gly	Cys	Ile	Val	Leu	Gln	Arg	Leu	Thr	Asp	Ile	Phe	Arg
145				150					155					160	
Arg	Tyr	Asp	Thr	Asp	Gln	Asp	Gly	Trp	Ile	Gln	Val	Ser	Tyr	Glu	Gln
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180 185

<210> 12725
<211> 2049
<212> DNA
<213> Homo sapiens

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cccagcctat ggtgagctct tgttacctgc ctggtgcagg ctctagaaat tcagaaagga 300
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gagcaggacc acagggacct tgaccgccaa gctgggggaa ggaagtgtga ataaagcccc 600
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Arg Cys Gly Phe Ser Val Asp Val Pro Arg Thr Ser Ser Ala Glu Glu
    50                  55                  60
Glu Ala Leu Leu Leu Thr Ile Phe Gly Arg Met Thr Phe Cys Cys Cys
65                  70                  75                  80
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Thr Pro Ser Ala Ala Ala Leu Ala Val Gln Pro Glu Ala Ala Gly Ser
65 70 75 80
Val Ala Met Glu Ala Ser Ser Asp Gly Glu Glu Asp Ala Glu Ser Thr
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Asp Lys Val Thr Glu Thr Val Met Asn Gly Gly Met Lys Glu Thr Leu
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Ser Leu Thr Val Asp Ala Lys Thr Glu Thr Ala Val Phe Lys Ser Glu
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50 55 60
Arg Arg Ala Val Lys Ala Gly Ala Tyr Ala Ala Cys Gln Glu Ala Lys
65 70 75 80
Glu Asp Ile Lys Ser His Ser Glu Asn Val Ser Gln His Pro Leu His
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Arg Leu Gly Ser Trp Met Asn Lys Ile Met Ser Tyr Ser Ser Asp Phe
115 120 125
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130 135 140
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145 150 155 160
Lys Gly Ala Arg Lys Ile Leu His Glu Leu Ile Phe Ser Ser Phe Phe
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Tyr Lys Gln Leu Gln Lys Glu Tyr Ile Ser Asp Asp His Asp Arg Ser
195 200 205
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225 230 235 240
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Gln His Ile Glu Val Asp Pro Asp Trp Glu Ala Ala Ile Ala Ile Gln
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625                 630                 635                 640
Ser Lys Ala Glu His Met Gln Lys Lys Arg Arg Lys Gln Glu Asn Lys
                645                 650                 655
Asp Glu Ala Leu Pro Pro Pro Pro Pro Pro Glu Phe Cys Pro Ala Phe
            660                 665                 670
Ser Lys Val Ile Asn Leu Leu Asn Cys Asp Ile Met Met Tyr Ile Leu
        675                 680                 685
Arg Thr Val Phe Glu Arg Ala Ile Asp Thr Asp Ser Asn Leu Trp Thr
    690                 695                 700
Glu Gly Met Leu Gln Met Ala Phe His Ile Leu Ala Leu Gly Leu Leu
705                 710                 715                 720
Glu Glu Lys Gln Gln Leu Gln Lys Ala Pro Glu Glu Glu Val Thr Phe
                725                 730                 735
Asp Phe Tyr His Lys Ala Ser Arg Leu Gly Ser Ser Ala Met Asn Ile
            740                 745                 750
Gln Met Leu Leu Glu Lys Leu Lys Gly Ile Pro Gln Leu Glu Gly Gln
        755                 760                 765
Lys Asp Met Ile Thr Trp Ile Leu Gln Met Phe Asp Thr Val Lys Arg
    770                 775                 780
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<212> DNA
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<220>
<221> CDS
<222> (424)..(1062)

<400> 12733

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ttggaattgt tgatgggtga caaaataaac actaatggtt tttggaagaa accagcctta 720
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09/20/2005 09:50:00

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<210> 12734
<211> 213
<212> PRT
<213> Homo sapiens

<400> 12734

09/25/2003 - 09:20 AM

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Ser Cys Asp Leu Phe Asp Glu Phe Asp Lys Met Asn Asn Gly Pro Val
            20                  25                  30
Leu Gly His Glu Glu Glu Val Gly Arg Arg Thr Thr Phe Arg Leu Phe
        35                  40                  45
Tyr Pro Glu Ser Val Phe Ser Asp Pro Ile His Asn Asp Pro Asn Thr
    50                  55                  60
Thr Val Ile Leu Thr Ala Phe Lys Pro His Asp Leu Arg Trp Leu Leu
65                  70                  75                  80
Glu Leu Leu Met Gly Asp Lys Ile Asn Thr Asn Gly Phe Trp Lys Lys
                85                  90                  95
Pro Ala Leu Asn Leu Ile Tyr Lys Pro Tyr Gln Ile Arg Ile Leu Asp
            100                 105                 110
Pro Phe Ile Ile Arg Thr Ala Ala Tyr Glu Leu Leu His Phe Pro Lys
        115                 120                 125
Val Phe Pro Lys Asn Gln Lys Pro Lys His Pro Thr Thr Gly Ile Ile
    130                 135                 140
Ala Ile Thr Leu Ala Phe Tyr Ile Ser His Glu Val His Leu Ala Gly
145                 150                 155                 160
Phe Lys Tyr Asn Phe Ser Asp Leu Lys Ser Pro Leu His Tyr Tyr Gly
                165                 170                 175
Asn Ala Thr Met Ser Leu Met Asn Lys Asn Ala Tyr His Asn Val Thr
            180                 185                 190
Ala Glu Gln Leu Phe Leu Lys Asp Ile Ile Glu Lys Asn Leu Val Ile
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Asn Leu Thr Gln Asp
    210
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0050250 - 0050250

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<211> 2257
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (119)..(1696)

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tgactataac atacacgtca ttgcaagtgt attcaaacaa tggcttcgag atttgcccaa 480

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tacactggaa cgcctcatct ttcatctagt caggattgct ctgcaggaag acactaatcg 660
aatgtctgct aatgctttgg ccattgtgtt tgcgccctgc attctccgct gccctgacac 720
cactgaccca ctacaaagtg tacaggacat cagtaagact accacttgtg tggaactgat 780
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<212> PRT
<213> Homo sapiens

<400> 12736
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35 40 45
Glu Asp Arg Thr Val Pro Leu Val Val Glu Lys Leu Ile Asn Tyr Ile
50 55 60
Glu Met His Gly Leu Tyr Thr Glu Gly Ile Tyr Arg Lys Ser Gly Ser
65 70 75 80

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Thr Asn Lys Ile Lys Glu Leu Arg Gln Gly Leu Asp Thr Asp Ala Glu
85 90 95
Ser Val Asn Leu Asp Asp Tyr Asn Ile His Val Ile Ala Ser Val Phe
100 105 110
Lys Gln Trp Leu Arg Asp Leu Pro Asn Pro Leu Met Thr Phe Glu Leu
115 120 125
Tyr Glu Glu Phe Leu Arg Ala Met Gly Leu Gln Glu Arg Lys Glu Thr
130 135 140
Ile Arg Gly Val Tyr Ser Val Ile Asp Gln Leu Ser Arg Thr His Leu
145 150 155 160
Asn Thr Leu Glu Arg Leu Ile Phe His Leu Val Arg Ile Ala Leu Gln
165 170 175
Glu Asp Thr Asn Arg Met Ser Ala Asn Ala Leu Ala Ile Val Phe Ala
180 185 190
Pro Cys Ile Leu Arg Cys Pro Asp Thr Thr Asp Pro Leu Gln Ser Val
195 200 205
Gln Asp Ile Ser Lys Thr Thr Thr Cys Val Glu Leu Ile Val Val Glu
210 215 220
Gln Met Asn Lys Tyr Lys Ala Arg Leu Lys Asp Ile Ser Ser Leu Glu
225 230 235 240
Phe Ala Glu Asn Lys Ala Lys Thr Arg Leu Ser Leu Ile Arg Arg Ser
245 250 255
Met Gly Lys Gly Arg Ile Arg Arg Gly Asn Tyr Pro Gly Pro Ser Ser
260 265 270
Pro Val Val Val Arg Leu Pro Ser Val Ser Asp Val Ser Glu Glu Thr
275 280 285
Leu Thr Ser Glu Ala Ala Met Glu Thr Asp Ile Thr Glu Gln Gln Gln
290 295 300
Ala Ala Met Gln Gln Glu Glu Arg Val Leu Thr Glu Gln Ile Glu Asn
305 310 315 320
Leu Gln Lys Glu Lys Glu Glu Leu Thr Phe Glu Met Leu Val Leu Glu
325 330 335
Pro Arg Ala Ser Asp Asp Glu Thr Leu Glu Ser Glu Ala Ser Ile Gly
340 345 350
Thr Ala Asp Ser Ser Glu Asn Leu Asn Met Glu Ser Glu Tyr Ala Ile
355 360 365
Ser Glu Lys Ser Glu Arg Ser Leu Ala Leu Ser Ser Leu Lys Thr Ala
370 375 380
Gly Lys Ser Glu Pro Ser Ser Lys Leu Arg Lys Gln Leu Lys Lys Gln
385 390 395 400
Gln Asp Ser Leu Asp Val Val Asp Ser Ser Val Ser Ser Leu Cys Leu
405 410 415
Ser Asn Thr Ala Ser Ser His Gly Thr Arg Lys Leu Phe Gln Ile Tyr
420 425 430
Ser Lys Ser Pro Phe Tyr Arg Ala Ala Ser Gly Asn Glu Ala Leu Gly
435 440 445
Met Glu Gly Pro Leu Gly Gln Thr Lys Phe Leu Glu Asp Lys Pro Gln
450 455 460

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Phe Ile Ser Arg Gly Thr Phe Asn Pro Glu Lys Gly Lys Gln Lys Leu
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Lys Asn Val Lys Asn Ser Pro Gln Lys Thr Lys Glu Thr Pro Glu Gly
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Thr Val Met Ser Gly Arg Arg Lys Thr Val Asp Pro Asp Cys Thr Ser
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<212> DNA
<213> Homo sapiens

<220>
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<222> (56)..(2218)

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<210> 12738
<211> 721
<212> PRT
<213> Homo sapiens

<400> 12738
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35 40 45
Gln Val Ile Leu Cys Gly Thr Cys Leu Ile Val Ser Ser Val Lys Asp
50 55 60
Ser Leu Thr Gly Lys Met His Val Leu Pro Leu Ile Gly Gly Lys Val
65 70 75 80
Glu Glu Val Lys Lys His Gln His Cys Leu Ala Phe Ser Ser Ser Gly
85 90 95
Pro Gln Ser Gln Thr Tyr Tyr Ile Cys Phe Asp Thr Phe Thr Glu Tyr
100 105 110
Leu Arg Trp Leu Arg Gln Val Ser Lys Val Ala Ser Gln Arg Ile Ser
115 120 125
Ser Val Asp Leu Ser Cys Cys Ser Leu Glu His Leu Pro Ala Asn Leu
130 135 140
Phe Tyr Ser Gln Asp Leu Thr His Leu Asn Leu Lys Gln Asn Phe Leu
145 150 155 160
Arg Gln Asn Pro Ser Leu Pro Ala Ala Arg Gly Leu Asn Glu Leu Gln
165 170 175
Arg Phe Ala Lys Leu Lys Ser Leu Asn Leu Ser Asn Asn His Leu Gly
180 185 190
Asp Phe Pro Leu Ala Val Cys Ser Ile Pro Thr Leu Ala Glu Leu Asn
195 200 205
Val Ser Cys Asn Ala Leu Arg Ser Val Pro Ala Ala Val Gly Val Met
210 215 220
His Asn Leu Gln Thr Phe Leu Leu Asp Gly Asn Phe Leu Gln Ser Leu
225 230 235 240
Pro Ala Glu Leu Glu Asn Met Lys Gln Leu Ser Tyr Leu Gly Leu Ser

EP 2 502 630 A2

0002420-0000456

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Val Asp Lys Leu Cys Met Ser Gly Asn Cys Val Glu Thr Leu Arg Leu
        275                 280                 285
Gln Ala Leu Arg Lys Met Pro His Ile Lys His Val Asp Leu Arg Leu
    290                 295                 300
Asn Val Ile Arg Lys Leu Ile Ala Asp Glu Val Asp Phe Leu Gln His
305                 310                 315                 320
Val Thr Gln Leu Asp Leu Arg Asp Asn Lys Leu Gly Asp Leu Asp Ala
                325                 330                 335
Met Ile Phe Asn Asn Ile Glu Val Leu His Cys Glu Arg Asn Gln Leu
            340                 345                 350
Val Thr Leu Asp Ile Cys Gly Tyr Phe Leu Lys Ala Leu Tyr Ala Ser
        355                 360                 365
Ser Asn Glu Leu Val Gln Leu Asp Val Tyr Pro Val Pro Asn Tyr Leu
    370                 375                 380
Ser Tyr Met Asp Val Ser Arg Asn Arg Leu Glu Asn Val Pro Glu Trp
385                 390                 395                 400
Val Cys Glu Ser Arg Lys Leu Glu Val Leu Asp Ile Gly His Asn Gln
                405                 410                 415
Ile Cys Glu Leu Pro Ala Arg Leu Phe Cys Asn Ser Ser Leu Arg Lys
            420                 425                 430
Leu Leu Ala Gly His Asn Gln Leu Ala Arg Leu Pro Glu Arg Leu Glu
        435                 440                 445
Arg Thr Ser Val Glu Val Leu Asp Val Gln His Asn Gln Leu Leu Glu
    450                 455                 460
Leu Pro Pro Asn Leu Leu Met Lys Ala Asp Ser Leu Arg Phe Leu Asn
465                 470                 475                 480
Ala Ser Ala Asn Lys Leu Glu Ser Leu Pro Pro Ala Thr Leu Ser Glu
                485                 490                 495
Glu Thr Asn Ser Ile Leu Gln Glu Leu Tyr Leu Thr Asn Asn Ser Leu
            500                 505                 510
Thr Asp Lys Cys Val Pro Leu Leu Thr Gly His Pro His Leu Lys Ile
        515                 520                 525
Leu His Met Ala Tyr Asn Arg Leu Gln Ser Phe Pro Ala Ser Lys Met
    530                 535                 540
Ala Lys Leu Glu Glu Leu Glu Glu Ile Asp Leu Ser Gly Asn Lys Leu
545                 550                 555                 560
Lys Ala Ile Pro Thr Thr Ile Met Asn Cys Arg Arg Met His Thr Val
                565                 570                 575
Ile Ala His Ser Asn Cys Ile Glu Val Phe Pro Glu Val Met Gln Leu
            580                 585                 590
Pro Glu Ile Lys Cys Val Asp Leu Ser Cys Asn Glu Leu Ser Glu Val
        595                 600                 605
Thr Leu Pro Glu Asn Leu Pro Pro Lys Leu Gln Glu Leu Asp Leu Thr
    610                 615                 620
Gly Asn Pro Arg Leu Val Leu Asp His Lys Thr Leu Glu Leu Leu Asn
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625 630 635 640
Asn Ile Arg Cys Phe Lys Ile Asp Gln Pro Ser Thr Gly Asp Ala Ser
645 650 655
Gly Ala Pro Ala Val Trp Ser His Gly Tyr Thr Glu Ala Ser Gly Val
660 665 670
Lys Asn Lys Leu Cys Val Ala Ala Leu Ser Val Asn Asn Phe Cys Asp
675 680 685
Asn Arg Glu Ala Leu Tyr Gly Val Phe Asp Gly Asp Arg Asn Val Glu
690 695 700
Val Pro Tyr Leu Leu Gln Cys Thr Met Ser Val Ile Leu Ala Glu Glu
705 710 715 720
Leu

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<210> 12739
<211> 1788
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (103)..(1398)

<400> 12739
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ctttttaaga aatattactt aaacatgtgg cttgctcagt gtttaattgc aagttttcaa 1740
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<210> 12740
<211> 432
<212> PRT
<213> Homo sapiens

<400> 12740
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35 40 45
Thr Asn Thr Arg Ser Asp Leu Gly Pro Cys Glu Lys Ile His Asp Glu
50 55 60
Asn Leu Arg Lys Gln Tyr Glu Lys Ser Ser Arg Phe Met Lys Val Gly
65 70 75 80
Tyr Glu Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val
85 90 95
Glu Arg Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn
100 105 110
Gln Gln Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Glu Glu Lys
115 120 125
Ile Gln Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu
130 135 140
Glu Leu Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys
145 150 155 160
Leu Val Glu Gln Leu Lys Glu Glu Arg Glu Leu Leu Arg Ser Thr Thr
165 170 175
Ser Thr Ile Glu Ser Phe Ala Ala Gln Glu Lys Gln Met Glu Val Cys
180 185 190
Glu Val Cys Gly Ala Phe Leu Ile Val Gly Asp Ala Gln Ser Arg Val
195 200 205
Asp Asp His Leu Met Gly Lys Gln Tyr Met Gly Tyr Ala Lys Ile Lys
210 215 220
Ala Thr Val Glu Glu Leu Lys Glu Lys Leu Arg Lys Arg Thr Glu Glu
225 230 235 240
Pro Asp Arg Asp Glu Arg Leu Lys Lys Glu Lys Gln Glu Arg Glu Glu
245 250 255
Arg Glu Lys Glu Arg Glu Arg Glu Arg Glu Glu Arg Glu Arg Lys Arg

0050250-0050500

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        275                 280                 285
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    290                 295                 300
Asp Arg Arg Cys Ser Arg Ser Arg Asp His Lys Arg Ser Arg Ser Arg
305                 310                 315                 320
Glu Arg Arg Arg Ser Arg Ser Arg Asp Arg Arg Arg Ser Arg Ser His
                325                 330                 335
Asp Arg Ser Glu Arg Lys His Arg Ser Arg Ser Arg Asp Arg Arg Arg
            340                 345                 350
Ser Lys Ser Arg Asp Arg Lys Ser Tyr Lys His Arg Ser Lys Ser Arg
        355                 360                 365
Asp Arg Glu Gln Asp Arg Lys Ser Lys Glu Lys Glu Lys Arg Gly Ser
    370                 375                 380
Asp Asp Lys Lys Ser Ser Val Lys Ser Gly Ser Arg Glu Lys Gln Ser
385                 390                 395                 400
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<210> 12741
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (112)..(978)

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gaacttcagc agtttttttat taaaattcgt gatgaactct gcaaaaatgg agagattctt 240
ctttcaccgg cactcagcta taccacaaaa catttgcata atgatgtgga gaaagagaga 300
aaggaaaaat tgccaaaaga aatagaggaa gataaactaa aacgagaaga agaaaaaaga 360
gaagctgaaa agagtgaaga ttcctctggt gctgcaggcc tctcaggctt acatcgcaca 420
tacagccagg actgtagctt taaaaacagc atgtaccatg ttggagatta cgtctatgtg 480
gaacctgcag aggccaacct acaaccacat atcgtctgta ttgaaagact gtgggaggat 540
tcagctggtg aaaaatggtt gtatggctgt tggttttacc gaccaaatga aacattccac 600
ctggctacac gaaaatttct agaaaaagaa gtttttaaga gtgactatta caacaaagtt 660
ccagttagta aaattctagg caagtgtgtg gtcatgtttg tcaaggaata ctttaagtta 720
tgcccagaaa acttccgaga tgaggatgtt tttgtctgtg aatcacggta ttctgccaaa 780
accaaatctt ttaagaaaat taaactgtgg accatgccca tcagctcagt caggtttgtc 840
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0050204.0050250

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tccagaaaat aaatgaataa agtattcaaa cttagaaaaa gagcaacaac acaaaacctt 1080
agccaaacag gaagaaggaa actataacag aaagaaattt acactttcaa aactgtacat 1140
tataatttaa aagtaaatca ggccaagtgc attggttcac gcctgtaatc ccagcatttt 1200
gggaggccaa ggcgggcaga tcacgagatc aggagttcga gaccagcctg accaacatgg 1260
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tcgtgctatt gcagtccagc ctgggcaaca agagcgaaac tctgtctcaa aaaataaata 1860
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<210> 12742
<211> 289
<212> PRT
<213> Homo sapiens

<400> 12742

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			20					25					30		
Arg	Asp	Glu	Leu	Cys	Lys	Asn	Gly	Glu	Ile	Leu	Leu	Ser	Pro	Ala	Leu
		35					40					45			
Ser	Tyr	Thr	Thr	Lys	His	Leu	His	Asn	Asp	Val	Glu	Lys	Glu	Arg	Lys
	50					55					60				
Glu	Lys	Leu	Pro	Lys	Glu	Ile	Glu	Glu	Asp	Lys	Leu	Lys	Arg	Glu	Glu
65					70					75					80
Glu	Lys	Arg	Glu	Ala	Glu	Lys	Ser	Glu	Asp	Ser	Ser	Gly	Ala	Ala	Gly
				85					90					95	
Leu	Ser	Gly	Leu	His	Arg	Thr	Tyr	Ser	Gln	Asp	Cys	Ser	Phe	Lys	Asn
			100					105					110		
Ser	Met	Tyr	His	Val	Gly	Asp	Tyr	Val	Tyr	Val	Glu	Pro	Ala	Glu	Ala
		115					120					125			
Asn	Leu	Gln	Pro	His	Ile	Val	Cys	Ile	Glu	Arg	Leu	Trp	Glu	Asp	Ser
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Ala	Gly	Glu	Lys	Trp	Leu	Tyr	Gly	Cys	Trp	Phe	Tyr	Arg	Pro	Asn	Glu
145					150					155					160
Thr	Phe	His	Leu	Ala	Thr	Arg	Lys	Phe	Leu	Glu	Lys	Glu	Val	Phe	Lys
				165					170					175	

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Ser Asp Tyr Tyr Asn Lys Val Pro Val Ser Lys Ile Leu Gly Lys Cys
180 185 190
Val Val Met Phe Val Lys Glu Tyr Phe Lys Leu Cys Pro Glu Asn Phe
195 200 205
Arg Asp Glu Asp Val Phe Val Cys Glu Ser Arg Tyr Ser Ala Lys Thr
210 215 220
Lys Ser Phe Lys Lys Ile Lys Leu Trp Thr Met Pro Ile Ser Ser Val
225 230 235 240
Arg Phe Val Pro Arg Asp Val Pro Leu Pro Val Val Arg Val Ala Ser
245 250 255
Val Phe Ala Asn Ala Asp Lys Gly Asp Asp Glu Lys Asn Thr Asp Asn
260 265 270
Ser Glu Asp Ser Arg Ala Glu Asp Asn Phe Asn Leu Glu Lys Val Cys
275 280 285
Arg

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<210> 12743
<211> 2076
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (122)..(1666)

<400> 12743
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agacagtaag ctatttgaga aagtcaaaga agtttgtcca aatgtgcatg agaagatcag 360
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gcttctctcc tgtacaaaca taatatttca ctgtgcagcc actgtacgct ttgacgacac 480
tctcagacat gctgtgcaac ttaacgtcac tgccacccgg cagctcttgc ttatggctag 540
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gaagcacatc gatgaagtta tctatccgtg ccctgtggag ccaaaaaaaa tcattgattc 660
ccttgagtgg ttagacgatg ctattattga cgagattaca cccaagctga tcagagattg 720
gcccaatatt tatacctaca ccaaggcctt gggagaaatg gtggtgcagc aagagagcag 780
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cccaggttgg gttgataata taaatggacc taatggaatc attattgcga ctgggaaagg 900
gtttcttcgg gccataaaag ctactccaat ggctgtggca gacgtaattc cagttgatac 960
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taattttacc agcaacagct tcacatcaca gtactggaat gcggtcagcc accgggcccc 1200

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ttgcgtatta aacgtgaaag tactcccact tttctatatt tagtttttct tttctctctg 1980
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<210> 12744
<211> 515
<212> PRT
<213> Homo sapiens

<400> 12744

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             20                  25                  30
Thr Ser Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala
         35                  40                  45
Gly Gln Thr Leu Gln Gln Gly Val Phe Gln Ile Leu Asp Ser Lys Leu
     50                  55                  60
Phe Glu Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg
 65                  70                  75                  80
Ala Ile Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu
                 85                  90                  95
Asp Met Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala
            100                 105                 110
Ala Thr Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn
        115                 120                 125
Val Thr Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys
    130                 135                 140
Leu Glu Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu
145                 150                 155                 160
Lys His Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys
                165                 170                 175
Ile Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile
            180                 185                 190
Thr Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys
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US 2005/0255500 A1

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        195                 200                 205
Ala Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile
    210                 215                 220
Ala Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe
225                 230                 235                 240
Pro Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala
                245                 250                 255
Thr Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val
            260                 265                 270
Ala Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val
        275                 280                 285
Gly Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His
    290                 295                 300
Ile Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val
305                 310                 315                 320
Gln Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg
                325                 330                 335
Arg Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp
            340                 345                 350
Asn Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu
        355                 360                 365
Arg Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu
    370                 375                 380
Leu Arg Thr Val Ser Met Leu Glu Tyr Phe Ile Asn Arg Ser Trp Glu
385                 390                 395                 400
Trp Ser Thr Tyr Asn Thr Glu Met Leu Met Ser Glu Leu Ser Pro Glu
                405                 410                 415
Asp Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu
            420                 425                 430
Tyr Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu
        435                 440                 445
Asp Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg
    450                 455                 460
Asn Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg
465                 470                 475                 480
Leu Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile
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Val Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr
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Leu Lys Val
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<210> 12745
<211> 1943
<212> DNA
<213> Homo sapiens

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<220>
<221> CDS
<222> (991)..(1548)

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acagtgttta ttttatggaa acactctaaa agaaaaacag acctgaagtt catcatgtgt 240
aaggttacac aaatctatct ttcaaatgag ttcattactc taaataattg tcagaagtta 300
cattttgtt taatataatc tttgcagtaa ccttccaaat tagggcaatt tttctgtcca 360
gatctgccta ctgaactaga atatttaatg agcaacaact tctgttgtga attaacggac 420
tgatattggg gtttgataaa tcagtttcct aaggtttgga taagccaaga gttagactct 480
aagaatataa aaaggcctag ataacatcat aaaagtaagg ttctagatcc acaaagcaga 540
gaactagacc cagattataa gtcactccag aggtcccatt tttctggatt tgagggagga 600
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cacaagagga gttatgaaga tgatgacgat atggacctac agcccaataa gcagaaagac 1020
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caaaaagagc aaaacttggt ctc 1943

<210> 12746
<211> 186
<212> PRT
<213> Homo sapiens

<400> 12746
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Leu Glu Thr Glu Ala Ser Thr Gly Gln Gln Leu Asn Ser Leu Asn Leu
            35                  40                  45
Ser Ser Pro Phe Asp Leu Asn Phe Pro Leu Pro Gly Glu Lys Gly Pro
        50                  55                  60
Ala Cys Leu Val Lys Val Tyr Glu Asp Trp Asp Cys Phe Lys Val Asn
 65                  70                  75                  80
Asp Ile Leu Glu Leu Tyr Gly Ile Leu Ser Val Asp Pro Val Leu Ser
                85                  90                  95
Ile Leu Asn Asn Asp Glu Arg Asp Ala Ser Ala Leu Leu Asp Pro Met
            100                 105                 110
Glu Cys Thr Asp Thr Ala Glu Glu Gln Arg Val His Ser Pro Pro Ala
        115                 120                 125
Ser Leu Val Pro Arg Ile His Val Ile Leu Ala Gln Lys Leu Gln His
    130                 135                 140
Ile Asn Pro Leu Leu Pro Ala Cys Leu Asn Lys Glu Glu Ser Lys Thr
145                 150                 155                 160
Cys Lys Cys Lys Cys Tyr Ser Leu Val Asn Tyr Arg Leu Leu Ala Ser
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Val Cys Pro Glu Leu Pro Val Thr Cys Ser
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<210> 12747
<211> 1549
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (100)..(822)

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gactatgggg cctttatcaa aatcccaggc tgtcggaagc aaggtctggt ccatcgaact 240
catatgtcat cctgtcgggt ggataagccc tctgagatag tagatgttgg agataaagtg 300
tgggtgaagc ttattggccg agagatgaaa aatgatagaa taaaagtatc cctctccatg 360
aaggttgtca atcaagggac tgggaaagac cttgatccca acaatgttat cattgagcaa 420
gaagagaggc ggaggcgatc cttccaggat tacactgggc agaagatcac ccttgaggct 480
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atgcaaccag gtgggactaa atactctctg atacctgatg aggaagagga aaaggaagag 600
gcaaagtcag cagagtttga gaagcctgac cctacaagga atccttctag aaaaagaaag 660
aaggagaaga agaaaaagaa acatagagat aggaagtcat ctgactctga cagctcagac 720
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aagaagaaaa agaagaagaa gcacaagaag aagcacaagg agtgagagta taaagagtgt 840

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cactgaacca gacagcgaag ccaagatcat tgttctactt tgtatttact actgtgtgaa 1500
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<211> 241
<212> PRT
<213> Homo sapiens

<400> 12748

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Ile Lys Ile Pro Gly Cys Arg Lys Gln Gly Leu Val His Arg Thr His
        35                  40                  45
Met Ser Ser Cys Arg Val Asp Lys Pro Ser Glu Ile Val Asp Val Gly
    50                  55                  60
Asp Lys Val Trp Val Lys Leu Ile Gly Arg Glu Met Lys Asn Asp Arg
65                  70                  75                  80
Ile Lys Val Ser Leu Ser Met Lys Val Val Asn Gln Gly Thr Gly Lys
                85                  90                  95
Asp Leu Asp Pro Asn Asn Val Ile Ile Glu Gln Glu Glu Arg Arg Arg
            100                 105                 110
Arg Ser Phe Gln Asp Tyr Thr Gly Gln Lys Ile Thr Leu Glu Ala Val
        115                 120                 125
Leu Asn Thr Thr Cys Lys Lys Cys Gly Cys Lys Gly His Phe Ala Lys
    130                 135                 140
Asp Cys Phe Met Gln Pro Gly Gly Thr Lys Tyr Ser Leu Ile Pro Asp
145                 150                 155                 160
Glu Glu Glu Glu Lys Glu Glu Ala Lys Ser Ala Glu Phe Glu Lys Pro
                165                 170                 175
Asp Pro Thr Arg Asn Pro Ser Arg Lys Arg Lys Lys Glu Lys Lys Lys
            180                 185                 190
Lys Lys His Arg Asp Arg Lys Ser Ser Asp Ser Asp Ser Ser Asp Ser
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Glu Ser Asp Thr Gly Lys Arg Ala Arg His Thr Ser Lys Asp Ser Lys
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<211> 1963
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (164)..(1186)

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aattactgtg gttggaggtg gagaactcgg tattgcctgc acattagcaa tttcagcaaa 660
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attacctacc aaaaaatgga aaagaatttt acatgcactt taaaatagta aaatggaaag 1920

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<211> 341
<212> PRT
<213> Homo sapiens

<400> 12750

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             20                  25                  30
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         35                  40                  45
Cys Phe Leu Lys Pro Thr Ala Asn Met Gly Ile Leu Val Gly Lys His
     50                  55                  60
Val Asp Ala Gln Gly Arg Ile Tyr Leu Pro Tyr Leu Gln Asn Trp Ser
 65                  70                  75                  80
His Pro Lys Ser Val Ile Val Gly Leu Ile Lys Glu Met Ile Ala Lys
                 85                  90                  95
Phe Gln Glu Glu Leu Pro Met Tyr Ser Leu Ser Ser Ser Asp Glu Ala
            100                 105                 110
Arg Gln Val Asp Leu Leu Ala Tyr Ile Ala Lys Ile Thr Glu Gly Val
        115                 120                 125
Ser Asp Thr Asn Ser Lys Ser Trp Ala Asn His Glu Asn Lys Thr Val
    130                 135                 140
Asn Lys Ile Thr Val Val Gly Gly Gly Glu Leu Gly Ile Ala Cys Thr
145                 150                 155                 160
Leu Ala Ile Ser Ala Lys Gly Ile Ala Asp Arg Leu Val Leu Leu Asp
                165                 170                 175
Leu Ser Glu Gly Thr Lys Gly Ala Thr Met Asp Leu Glu Ile Phe Asn
            180                 185                 190
Leu Pro Asn Val Glu Ile Ser Lys Asp Leu Ser Ala Ser Ala His Ser
        195                 200                 205
Lys Val Val Ile Phe Thr Val Asn Ser Leu Gly Ser Ser Gln Ser Tyr
    210                 215                 220
Leu Asp Val Val Gln Ser Asn Val Asp Met Phe Arg Ala Leu Val Pro
225                 230                 235                 240
Ala Leu Gly His Tyr Ser Gln His Ser Val Leu Leu Val Ala Ser Gln
                245                 250                 255
Pro Val Glu Ile Met Thr Tyr Val Thr Trp Lys Leu Ser Thr Phe Pro
            260                 265                 270
Ala Asn Arg Val Ile Gly Ile Gly Cys Asn Leu Asp Ser Gln Arg Leu
        275                 280                 285
Gln Tyr Ile Ile Thr Asn Val Leu Lys Ala Gln Thr Ser Gly Lys Glu
    290                 295                 300
Val Trp Val Ile Gly Glu Gln Gly Glu Asp Lys Val Leu Thr Trp Ser
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325 330 335
Arg Asp Ile Met Ile
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<210> 12751
<211> 1921
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (140)..(703)

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ccgtcgcgcc actcctccga tggccacaga tgtctttaat tccaaaaacc tggccgttca 180
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cgacacaagt agtgaggtgc tggatgagct ctacagagtg accagggagt acacccaaaa 300
caagaaggag gcagagaaga tcatcaagaa cctcatcaag acagtcatca agctggccat 360
tctttatagg aataatcagt ttaatcaaga tgagctagca ttgatggaga aatttaagaa 420
gaaagttcat cagcttgcta tgaccgtggt cagtttccat caggtggatt ataccttga 480
ccggaatgtg ttatccaggc tgttaaatga atgcagagag atgctgcacc aaatcattca 540
gcgccacctc actgccaagt cacatggacg ggttaataat gtgtttgatc atttttcaga 600
ttgtgaattt ttggctgcct tgtataatcc ttttgggaat tttaaacccc acttacaaaa 660
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aagaatttc taaagattac acatatttca gaaagacttt acccaattca gttgtcagac 840
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<210> 12752
<211> 188
<212> PRT
<213> Homo sapiens

<400> 12752

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            20                  25                  30
Ile Asp Asp Thr Ser Ser Glu Val Leu Asp Glu Leu Tyr Arg Val Thr
        35                  40                  45
Arg Glu Tyr Thr Gln Asn Lys Lys Glu Ala Glu Lys Ile Ile Lys Asn
    50                  55                  60
Leu Ile Lys Thr Val Ile Lys Leu Ala Ile Leu Tyr Arg Asn Asn Gln
65                  70                  75                  80
Phe Asn Gln Asp Glu Leu Ala Leu Met Glu Lys Phe Lys Lys Lys Val
                85                  90                  95
His Gln Leu Ala Met Thr Val Val Ser Phe His Gln Val Asp Tyr Thr
            100                 105                 110
Phe Asp Arg Asn Val Leu Ser Arg Leu Leu Asn Glu Cys Arg Glu Met
        115                 120                 125
Leu His Gln Ile Ile Gln Arg His Leu Thr Ala Lys Ser His Gly Arg
    130                 135                 140
Val Asn Asn Val Phe Asp His Phe Ser Asp Cys Glu Phe Leu Ala Ala
145                 150                 155                 160
Leu Tyr Asn Pro Phe Gly Asn Phe Lys Pro His Leu Gln Lys Leu Cys
                165                 170                 175
Asp Gly Ile Asn Lys Met Leu Asp Glu Glu Asn Ile
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<211> 2191
<212> DNA
<213> Homo sapiens

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tgtggttaat taaaaagtac tcattggtgt gccttgtata gaaaaaatat acactcacta 300
tcatgagaac agcaaggagg gagtctgccc ccaagattca atcacctccc agtagacccc 360

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ccatatcgtg attgttctat aataaagaga tgcccacatg tgtttcatca gggacagtgc 480
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tagtgaagga actgtttagt atctccactg tggtggtaga tacccgaacc taaacatgtg 720
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<211> 1799
<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (76)..(1734)

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WO 2005/035586 PCT/US2004/033000

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<211> 553
<212> PRT
<213> Homo sapiens

<400> 12755

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			20					25				30			
Pro	Cys	Lys	Val	Ser	Glu	Tyr	Thr	Ser	Thr	Thr	Gly	Leu	Val	Pro	Cys
		35					40					45			
Ser	Ala	Thr	Pro	Thr	Thr	Phe	Gly	Asp	Leu	Arg	Ala	Ala	Asn	Gly	Gln
	50					55					60				
Gly	Gln	Gln	Arg	Arg	Arg	Ile	Thr	Ser	Val	Gln	Pro	Pro	Thr	Gly	Leu
65					70					75					80
Gln	Glu	Trp	Leu	Lys	Met	Phe	Gln	Ser	Trp	Ser	Gly	Pro	Glu	Lys	Leu
				85					90					95	
Leu	Ala	Leu	Asp	Glu	Leu	Ile	Asp	Ser	Cys	Glu	Pro	Thr	Gln	Val	Lys
			100					105					110		
His	Met	Met	Gln	Val	Ile	Glu	Pro	Gln	Phe	Gln	Arg	Asp	Phe	Ile	Ser

EP 2 302 056 A2

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Lys Asp Leu Leu Gln Ala Ala Gln Thr Cys Arg Tyr Trp Arg Ile Leu
145                 150                 155                 160
Ala Glu Asp Asn Leu Leu Trp Arg Glu Lys Cys Lys Glu Glu Gly Ile
                165                 170                 175
Asp Glu Pro Leu His Ile Lys Arg Arg Lys Val Ile Lys Pro Gly Phe
            180                 185                 190
Ile His Ser Pro Trp Lys Ser Ala Tyr Ile Arg Gln His Arg Ile Asp
        195                 200                 205
Thr Asn Trp Arg Arg Gly Glu Leu Lys Ser Pro Lys Val Leu Lys Gly
    210                 215                 220
His Asp Asp His Val Ile Thr Cys Leu Gln Phe Cys Gly Asn Arg Ile
225                 230                 235                 240
Val Ser Gly Ser Asp Asp Asn Thr Leu Lys Val Trp Ser Ala Val Thr
                245                 250                 255
Gly Lys Cys Leu Arg Thr Leu Val Gly His Thr Gly Gly Val Trp Ser
            260                 265                 270
Ser Gln Met Arg Asp Asn Ile Ile Ile Ser Gly Ser Thr Asp Arg Thr
        275                 280                 285
Leu Lys Val Trp Asn Ala Glu Thr Gly Glu Cys Ile His Thr Leu Tyr
    290                 295                 300
Gly His Thr Ser Thr Val Arg Cys Met His Leu His Glu Lys Arg Val
305                 310                 315                 320
Val Ser Gly Ser Arg Asp Ala Thr Leu Arg Val Trp Asp Ile Glu Thr
                325                 330                 335
Gly Gln Cys Leu His Val Leu Met Gly His Val Ala Ala Val Arg Cys
            340                 345                 350
Val Gln Tyr Asp Gly Arg Arg Val Val Ser Gly Ala Tyr Asp Phe Met
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Val Lys Val Trp Asp Pro Glu Thr Glu Thr Cys Leu His Thr Leu Gln
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Gly His Thr Asn Arg Val Tyr Ser Leu Gln Phe Asp Gly Ile His Val
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Gly Asn Cys Ile His Thr Leu Thr Gly His Gln Ser Leu Thr Ser Gly
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Val Lys Ile Trp Asp Ile Lys Thr Gly Gln Cys Leu Gln Thr Leu Gln
    450                 455                 460
Gly Pro Asn Lys His Gln Ser Ala Val Thr Cys Leu Gln Phe Asn Lys
465                 470                 475                 480
Asn Phe Val Ile Thr Ser Ser Asp Asp Gly Thr Val Lys Leu Trp Asp
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Leu Lys Thr Gly Glu Phe Ile Arg Asn Leu Val Thr Leu Glu Ser Gly
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DEMANDE - 2005200

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Val Cys Ala Val Gly Ser Arg Asn Gly Thr Glu Glu Thr Lys Leu Leu
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Val Leu Asp Phe Asp Val Asp Met Lys
545                 550
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<210> 12756
<211> 1485
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (21)..(842)

<400> 12756
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tgagctatgc cttgacctct cctgatgcct catacttagg ttccatcgcc cggctcttca 180
aaaatctcaa ctttgtgctg cttgtcatca cctatggtct gaatgctggt gctttttatg 240
ccttgtccac tcttctgaat cgcatggtga tctggcacta cccgggggaa gaagtgaatg 300
ctggaagaat tggcctgacg atcgtcattg caggaatgct tggggctgtg atctcaggaa 360
tctggctgga taggtccaaa acctacaaag agacaaccct ggtagtctat atcatgacac 420
tggtgggcat ggtggtgtac acgtttacct tgaacctggg acacctgtgg gtagtgttca 480
tcactgctgg cacaatgggc ttctttatga ctggctatca cccactggga tttgagtttg 540
ctgtggagct cacgtaccca gaatcagaag gcatctcctc cggcctcctc aacatatctg 600
cgcaggtatt tgggatcatc tttaccatct cccagggcca gattattgac aactatggaa 660
ccaagcctgg gaacatcttc ctgtgtgtgt tccttactct tggagcagcc ctcactgcat 720
tcattaaggc agatctccgg agacagaaag caaacaaaga aactcttgag aacaaactcc 780
aagaggagga ggaggagagc aacaccagca aagtgcccac tgctgtgtca gaggatcatc 840
tctgagagga aggtggtgac aactcaggga acacgaacac cccacctttt ccttcagcac 900
agctctcacc gccagcacaa agggcttcgc tagagatgtt tttggaggga atcagtggga 960
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ccaccgggac ttgtgggcct aaattttcct ggcctaacgg gtctgtctcc aaaccctctt 1440
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<210> 12757
<211> 274

US20150376300A1

<212> PRT
<213> Homo sapiens

<400> 12757

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Ser Leu Ser Tyr Ala Leu Thr Ser Pro Asp Ala Ser Tyr Leu Gly Ser
        35                  40                  45
Ile Ala Arg Leu Phe Lys Asn Leu Asn Phe Val Leu Leu Val Ile Thr
    50                  55                  60
Tyr Gly Leu Asn Ala Gly Ala Phe Tyr Ala Leu Ser Thr Leu Leu Asn
65                  70                  75                  80
Arg Met Val Ile Trp His Tyr Pro Gly Glu Glu Val Asn Ala Gly Arg
                85                  90                  95
Ile Gly Leu Thr Ile Val Ile Ala Gly Met Leu Gly Ala Val Ile Ser
            100                 105                 110
Gly Ile Trp Leu Asp Arg Ser Lys Thr Tyr Lys Glu Thr Thr Leu Val
        115                 120                 125
Val Tyr Ile Met Thr Leu Val Gly Met Val Val Tyr Thr Phe Thr Leu
    130                 135                 140
Asn Leu Gly His Leu Trp Val Val Phe Ile Thr Ala Gly Thr Met Gly
145                 150                 155                 160
Phe Phe Met Thr Gly Tyr His Pro Leu Gly Phe Glu Phe Ala Val Glu
                165                 170                 175
Leu Thr Tyr Pro Glu Ser Glu Gly Ile Ser Ser Gly Leu Leu Asn Ile
            180                 185                 190
Ser Ala Gln Val Phe Gly Ile Ile Phe Thr Ile Ser Gln Gly Gln Ile
        195                 200                 205
Ile Asp Asn Tyr Gly Thr Lys Pro Gly Asn Ile Phe Leu Cys Val Phe
    210                 215                 220
Leu Thr Leu Gly Ala Ala Leu Thr Ala Phe Ile Lys Ala Asp Leu Arg
225                 230                 235                 240
Arg Gln Lys Ala Asn Lys Glu Thr Leu Glu Asn Lys Leu Gln Glu Glu
                245                 250                 255
Glu Glu Glu Ser Asn Thr Ser Lys Val Pro Thr Ala Val Ser Glu Asp
            260                 265                 270
His Leu
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<210> 12758
<211> 2022
<212> DNA
<213> Homo sapiens

<220>

<221> CDS
<222> (27)..(836)

<400> 12758
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ctgcgcttga ggacttggag gtcctgtcta gggaacttat agaaatgctg gcaatttcaa 180
gaaaccaaaa gttgttacag gctggagagg aaaaccaggt cctggagttg ttaattcacc 240
gagatgggga atttcaagaa ctaatgaaat tggcacttaa tcagggaaaa attcatcatg 300
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aacagctaaa ggaagcagaa caaatactgg caacagctgt ttaccaagcg aaggagaaac 420
tcaagtcaat agaaaaagca agaaaaggtg ctatctcctc tgaagaaata attaagtatg 480
cacataggat cagtgcaagt aatgctgtat gtgctccact gacctgggtt ccaggggacc 540
cccggagacc ctacccaact gatttagaga tgagaagtgg gttactgggt cagatgaaca 600
atccttccac taatggcgtg aatggccatt taccaggaga tgcacttgca gcaggaagat 660
tgccagatgt ccttgctcca cagtatccat ggcagtcaaa tgacatgtcg atgaatatgt 720
taccaccaaa tcatagtagt gacttttttgt tggaacctcc tgggcataat aaagaaaatg 780
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gcagttgcta tgtgctttct taccctgttc tgttccagtt ttgctggatt tgtacatagc 1140
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<210> 12759
<211> 270
<212> PRT
<213> Homo sapiens

<400> 12759
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03503-0043000

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Ala Leu Glu Asp Leu Glu Val Leu Ser Arg Glu Leu Ile Glu Met Leu
            35                  40                  45
Ala Ile Ser Arg Asn Gln Lys Leu Leu Gln Ala Gly Glu Glu Asn Gln
        50                  55                  60
Val Leu Glu Leu Leu Ile His Arg Asp Gly Glu Phe Gln Glu Leu Met
65                  70                  75                  80
Lys Leu Ala Leu Asn Gln Gly Lys Ile His His Glu Met Gln Val Leu
                85                  90                  95
Glu Lys Glu Val Glu Lys Arg Asp Ser Asp Ile Gln Gln Leu Gln Lys
            100                 105                 110
Gln Leu Lys Glu Ala Glu Gln Ile Leu Ala Thr Ala Val Tyr Gln Ala
        115                 120                 125
Lys Glu Lys Leu Lys Ser Ile Glu Lys Ala Arg Lys Gly Ala Ile Ser
    130                 135                 140
Ser Glu Glu Ile Ile Lys Tyr Ala His Arg Ile Ser Ala Ser Asn Ala
145                 150                 155                 160
Val Cys Ala Pro Leu Thr Trp Val Pro Gly Asp Pro Arg Arg Pro Tyr
                165                 170                 175
Pro Thr Asp Leu Glu Met Arg Ser Gly Leu Leu Gly Gln Met Asn Asn
            180                 185                 190
Pro Ser Thr Asn Gly Val Asn Gly His Leu Pro Gly Asp Ala Leu Ala
        195                 200                 205
Ala Gly Arg Leu Pro Asp Val Leu Ala Pro Gln Tyr Pro Trp Gln Ser
    210                 215                 220
Asn Asp Met Ser Met Asn Met Leu Pro Pro Asn His Ser Ser Asp Phe
225                 230                 235                 240
Leu Leu Glu Pro Pro Gly His Asn Lys Glu Asn Glu Asp Asp Val Glu
                245                 250                 255
Ile Met Ser Thr Asp Ser Ser Ser Ser Ser Ser Glu Ser Asp
            260                 265                 270
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<210> 12760
<211> 2077
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (131)..(2032)

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tacagaatca atgtctttgg ttccagcaac aaattatata tatacacccc tgaatcaact 180
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0050505-0070000

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gccaatgcag tattttgacc tgacttgtca gctcttgggc aaagcagaag tggacggagc 660
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<210> 12761
<211> 634
<212> PRT
<213> Homo sapiens

<400> 12761
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Leu Lys Gly Gly Thr Ile Val Asn Val Tyr Gly Val Val Lys Phe Phe
20 25 30
Lys Pro Pro Tyr Leu Ser Lys Gly Thr Asp Tyr Cys Ser Val Val Thr
35 40 45
Ile Val Asp Gln Thr Asn Val Lys Leu Thr Cys Leu Leu Phe Ser Gly
50 55 60
Asn Tyr Glu Ala Leu Pro Ile Ile Tyr Lys Asn Gly Asp Ile Val Arg

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 65                  70                  75                  80
Phe His Arg Leu Lys Ile Gln Val Tyr Lys Lys Glu Thr Gln Gly Ile
                85                  90                  95
Thr Ser Ser Gly Phe Ala Ser Leu Thr Phe Glu Gly Thr Leu Gly Ala
            100                 105                 110
Pro Ile Ile Pro Arg Thr Ser Ser Lys Tyr Phe Asn Phe Thr Thr Glu
        115                 120                 125
Asp His Lys Met Val Glu Ala Leu Arg Val Trp Ala Ser Thr His Met
    130                 135                 140
Ser Pro Ser Trp Thr Leu Leu Lys Leu Cys Asp Val Gln Pro Met Gln
145                 150                 155                 160
Tyr Phe Asp Leu Thr Cys Gln Leu Leu Gly Lys Ala Glu Val Asp Gly
                165                 170                 175
Ala Ser Phe Leu Leu Lys Val Trp Asp Gly Thr Arg Thr Pro Phe Pro
            180                 185                 190
Ser Trp Arg Val Leu Ile Gln Asp Leu Val Leu Glu Gly Asp Leu Ser
        195                 200                 205
His Ile His Arg Leu Gln Asn Leu Thr Ile Asp Ile Leu Val Tyr Asp
    210                 215                 220
Asn His Val His Val Ala Arg Ser Leu Lys Val Gly Ser Phe Leu Arg
225                 230                 235                 240
Ile Tyr Ser Leu His Thr Lys Leu Gln Ser Met Asn Ser Glu Asn Gln
                245                 250                 255
Thr Met Leu Ser Leu Glu Phe His Leu His Gly Gly Thr Ser Tyr Gly
            260                 265                 270
Arg Gly Ile Arg Val Leu Pro Glu Ser Asn Ser Asp Val Asp Gln Leu
        275                 280                 285
Lys Lys Asp Leu Glu Ser Ala Asn Leu Thr Ala Asn Gln His Ser Asp
    290                 295                 300
Val Ile Cys Gln Ser Glu Pro Asp Asp Ser Phe Pro Ser Ser Gly Ser
305                 310                 315                 320
Val Ser Leu Tyr Glu Val Glu Arg Cys Gln Gln Leu Ser Ala Thr Ile
                325                 330                 335
Leu Thr Asp His Gln Tyr Leu Glu Arg Thr Pro Leu Cys Ala Ile Leu
            340                 345                 350
Lys Gln Lys Ala Pro Gln Gln Tyr Arg Ile Arg Ala Lys Leu Arg Ser
        355                 360                 365
Tyr Lys Pro Arg Arg Leu Phe Gln Ser Val Lys Leu His Cys Pro Lys
    370                 375                 380
Cys His Leu Leu Gln Glu Val Pro His Glu Gly Asp Leu Asp Ile Ile
385                 390                 395                 400
Phe Gln Asp Gly Ala Thr Lys Thr Pro Asp Val Lys Leu Gln Asn Thr
                405                 410                 415
Ser Leu Tyr Asp Ser Lys Ile Trp Thr Thr Lys Asn Gln Lys Gly Arg
            420                 425                 430
Lys Val Ala Val His Phe Val Lys Asn Asn Gly Ile Leu Pro Leu Ser
        435                 440                 445
Asn Glu Cys Leu Leu Leu Ile Glu Gly Gly Thr Leu Ser Glu Ile Cys
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0050305-0050600

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    450                 455                 460
Lys Leu Ser Asn Lys Phe Asn Ser Val Ile Pro Val Arg Ser Gly His
465                 470                 475                 480
Glu Asp Leu Glu Leu Leu Asp Leu Ser Ala Pro Phe Leu Ile Gln Gly
                485                 490                 495
Thr Ile His His Tyr Gly Cys Lys Gln Cys Ser Ser Leu Arg Ser Ile
            500                 505                 510
Gln Asn Leu Asn Ser Leu Val Asp Lys Thr Ser Trp Ile Pro Ser Ser
        515                 520                 525
Val Ala Glu Ala Leu Gly Ile Val Pro Leu Gln Tyr Val Phe Val Met
    530                 535                 540
Thr Phe Thr Leu Asp Asp Gly Thr Gly Val Leu Glu Ala Tyr Leu Met
545                 550                 555                 560
Asp Ser Asp Lys Phe Phe Gln Ile Pro Ala Ser Glu Val Leu Met Asp
                565                 570                 575
Asp Asp Leu Gln Lys Ser Val Asp Met Ile Met Asp Met Phe Cys Pro
            580                 585                 590
Pro Gly Ile Lys Ile Asp Ala Tyr Pro Trp Leu Glu Cys Phe Ile Lys
        595                 600                 605
Ser Tyr Asn Val Thr Asn Gly Thr Asp Asn Gln Ile Cys Tyr Gln Ile
    610                 615                 620
Phe Asp Thr Thr Val Ala Glu Asp Val Ile
625                 630
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<210> 12762
<211> 1835
<212> DNA
<213> Homo sapiens

<400> 12762

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0038736-0056-0

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<210> 12763
<211> 1174
<212> DNA
<213> Homo sapiens

<400> 12763
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<210> 12764
<211> 3208
<212> DNA
<213> Homo sapiens

CONFIDENTIAL

0030230.00000

<400> 12764

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<400> 12766

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Gln Leu Arg Gln Val Gly Gln Ile Ile Arg Val Pro Ala Arg Met Ala
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Val Arg Ile Ala Val Arg Gly Leu Ala Pro Glu Gln Pro Val Thr Leu
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Arg Ala Ser Leu Arg Asp Glu Lys Gly Ala Leu Phe Gln Ala His Ala
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Arg Tyr Arg Ala Asp Thr Leu Gly Glu Leu Asp Leu Glu Arg Ala Pro
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Ala Leu Gly Gly Ser Phe Ala Gly Leu Glu Pro Met Gly Leu Leu Trp
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Asp Pro Gly Arg Leu Leu Cys Gln Thr Arg His Glu Arg Tyr Phe Leu
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Pro Pro Gly Val Arg Arg Glu Pro Val Arg Val Gly Arg Val Arg Gly
        195                 200                 205
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WO 2005/003300

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Asp Ile Val Asp Val Leu Asn Ser Pro Leu Glu Gly Pro Asp Gln Lys
        355                 360                 365
Ser Phe Ile Pro Val Glu Arg Ala Glu Ser Thr Phe Leu Phe Leu Val
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Glu Pro Arg Ala His Ala Met Ala Gln Val Asp Ala Trp Lys Gln Leu
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<400> 12767

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<212> PRT
<213> Homo sapiens

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<400> 12768

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     50                  55                  60
Val Val Leu Thr Ile Asn Arg Glu Ala Phe Pro Ala His Lys Val Val
 65                  70                  75                  80
Leu Ala Ala Cys Ser Asp Tyr Phe Arg Ala Met Phe Thr Gly Gly Met
                 85                  90                  95
Arg Glu Ala Ser Gln Asp Val Ile Glu Leu Lys Gly Val Ser Ala Arg
            100                 105                 110
Gly Leu Arg His Ile Ile Asp Phe Ala Tyr Ser Ala Glu Val Thr Leu
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Asp Leu Asp Cys Val Gln Asp Val Leu Gly Ala Ala Val Phe Leu Gln
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Met Leu Pro Val Val Glu Leu Cys Glu Glu Phe Leu Lys Ala Ala Met
145                 150                 155                 160
Ser Val Glu Thr Cys Leu Asn Ile Gly Gln Met Ala Thr Thr Phe Ser
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Leu Ala Ser Leu Arg Glu Ser Val Asp Ala Phe Thr Phe Arg His Phe
            180                 185                 190
Leu Gln Ile Ala Glu Glu Glu Asp Phe Leu Arg Leu Pro Leu Glu Arg
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Arg Thr Trp Gly His Ala Gly Ala Ala Ser Gly Gly Arg Leu Tyr Ile
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Ser Gly Gly Tyr Gly Ile Ser Val Glu Asp Lys Lys Ala Leu His Cys
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Leu Gly Gly Arg Met Asp His Val Asp Arg Cys Phe Asp Val Leu Ala
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Met Arg Ala Gly Gln Ser Glu Ala Gly Cys Cys Leu Leu Glu Arg Lys
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Pro Gly Ala Met His Thr Lys Leu Leu Gly Lys Ala Glu Ser Thr Pro
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Arg Leu Leu Thr Lys Thr Cys Gly Gly Gly Arg Leu Pro Leu Ser Thr
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Ile Arg Asn Gln Ala Trp Pro Gln Pro Glu Gly Thr Cys Ser Leu Met
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<212> PRT
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35 40 45
Asn Met Gln Arg Gln Ile Val Arg Ser Phe Ser Ser Gly Lys Arg Glu
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Gly Gly Asp Phe Val Cys Cys Ala Leu Ser Pro Arg Gly Glu Trp Ile
65 70 75 80
Tyr Cys Val Gly Glu Asp Phe Val Leu Tyr Cys Phe Ser Thr Val Thr
85 90 95
Gly Lys Leu Glu Arg Thr Leu Thr Val His Glu Lys Asp Val Ile Gly
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<212> DNA
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<212> DNA
<213> Homo sapiens

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09/05/2005 09:50 FAX

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Pro Cys Gly Asp Ala Gln Ala Ala Ala Glu Gly Ala Val Leu Gly Leu
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Arg Glu Gly Leu Arg Gly Val Ile Pro Gln Asp Thr Gly Ser Pro Val
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Gln Leu Val Ser Lys Ile Cys Pro Leu Met Ile Ser Arg Asn His Cys
50 55 60
Val Leu Lys Gln Asn Pro Glu Gly Gln Trp Thr Ile Met Asp Asn Lys
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Ser Leu Asn Gly Val Trp Leu Asn Arg Ala Arg Leu Glu Pro Leu Arg
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Val Tyr Ser Ile His Gln Gly Asp Tyr Ile Gln Leu Gly Val Pro Leu
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<220>
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<222> (184)..(618)

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<212> PRT
<213> Homo sapiens

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Ser Asp Ala Pro Pro Ser Ala Ala Ala Pro Asp Ser Gly Pro Glu Ala
35 40 45
Gly Gly Leu His Ser Gly Met Leu Glu Asp Gly Leu Pro Ser Asn Gly
50 55 60
Val Pro Arg Ser Thr Ala Pro Gly Gly Ile Pro Asn Pro Glu Lys Lys
65 70 75 80
Thr Asn Cys Glu Thr Gln Cys Pro Asn Pro Gln Ser Leu Ser Ser Gly
85 90 95
Pro Leu Thr Gln Lys Gln Asn Gly Leu Gln Thr Thr Glu Ala Lys Arg
100 105 110
Asp Ala Lys Arg Met Pro Ala Lys Glu Val Thr Ile Asn Val Thr Asp

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115 120 125
Ser Ile Gln Gln Met Asp Arg Ser Arg Arg Ile Thr Lys Asn Cys Val
130 135 140
Asn
145

<210> 16727
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<212> DNA
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<220>
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<222> (718)..(1017)

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<211> 100
<212> PRT
<213> Homo sapiens

<400> 16728
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Ile Thr Ser Pro Glu Gly Ser Phe Pro Leu Pro Thr Gln Ser Pro Val
20 25 30
Pro Glu Arg Arg Leu Gln His Thr Asn Asp Arg Arg Ile Gly Leu Gln
35 40 45
Gly Ser Arg Arg Leu Glu Leu Cys Pro Val Arg Cys Val Ala Leu Ala
50 55 60
Asp Pro Ser Met Glu Tyr Ser Cys Leu Pro Arg Pro Ser Ser Cys Gly
65 70 75 80
Phe Ser Ser Gly Thr Arg Gly Cys Phe Ser Gln Glu Gly Gln Trp Glu
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Gln Gly Cys Val
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<210> 16729
<211> 2973
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (484)..(792)

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<211> 103

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<212> PRT
<213> Homo sapiens

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20 25 30
Cys Ser Glu Pro Arg Leu Cys His Cys Thr Pro Gly Trp Ala Thr Arg
35 40 45
Val Arg Leu Tyr Leu Asn Lys Lys Lys Glu Lys Asn Tyr Thr Asn Cys
50 55 60
Cys Ser Leu Ser Gly Ser Thr Thr Leu Val Cys Asn Cys Lys Asn Tyr
65 70 75 80
Arg Gln Ser Ala Ser Glu Lys Leu Thr Gly Leu Glu Asn Leu Lys Leu
85 90 95
Phe Ile Asp Lys Asn Ser Glu
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<211> 2103
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (17)..(1771)

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<210> 16732
<211> 585
<212> PRT
<213> Homo sapiens

<400> 16732

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Arg	Glu	Ser	Gly	Lys	Asn	Cys	Lys	Val	Cys	Ile	Phe	Ser	Lys	Asp	Gly
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65					70					75					80
Leu	Glu	Phe	Pro	Pro	Lys	Asn	Thr	Val	Leu	Ala	Thr	Trp	Gln	Pro	Tyr
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180 185 190
Gly Ala Pro Ser Phe Val Arg Leu Tyr Gln Tyr Pro Asn Phe Ala Gly
195 200 205
Pro His Ala Ala Leu Ala Asn Lys Ser Phe Phe Lys Ala Asp Lys Val
210 215 220
Thr Met Leu Trp Asn Lys Lys Ala Thr Ala Val Leu Val Ile Ala Ser
225 230 235 240
Thr Asp Val Asp Lys Thr Gly Ala Ser Tyr Tyr Gly Glu Gln Thr Leu
245 250 255
His Tyr Ile Ala Thr Asn Gly Glu Ser Ala Val Val Gln Leu Pro Lys
260 265 270
Asn Gly Pro Ile Tyr Asp Val Val Trp Asn Ser Ser Ser Thr Glu Phe
275 280 285
Cys Ala Val Tyr Gly Phe Met Pro Ala Lys Ala Thr Ile Phe Asn Leu
290 295 300
Lys Cys Asp Pro Val Phe Asp Phe Gly Thr Gly Pro Arg Asn Ala Ala
305 310 315 320
Tyr Tyr Ser Pro His Gly His Ile Leu Val Leu Ala Gly Phe Gly Asn
325 330 335
Leu Arg Gly Gln Met Glu Val Trp Asp Val Lys Asn Tyr Lys Leu Ile
340 345 350
Ser Lys Pro Val Ala Ser Asp Ser Thr Tyr Phe Ala Trp Cys Pro Asp
355 360 365
Gly Glu His Ile Leu Thr Ala Thr Cys Ala Pro Arg Leu Arg Val Asn
370 375 380
Asn Gly Tyr Lys Ile Trp His Tyr Thr Gly Ser Ile Leu His Lys Tyr
385 390 395 400
Asp Val Pro Ser Asn Ala Glu Leu Trp Gln Val Ser Trp Gln Pro Phe
405 410 415
Leu Asp Gly Ile Phe Pro Ala Lys Thr Ile Thr Tyr Gln Ala Val Pro
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Gln Ile Gln Ser Tyr Thr Cys Glu Ile Asp Ala Leu Lys Gly Thr Asn
65 70 75 80
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100 105 110
Arg His Leu Lys Asp Glu Met Ala Arg His Leu Arg Glu Tyr Gln Asp
115 120 125
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Lys Leu Leu Glu Gly Glu Glu Ser Arg Ile Asn Leu Pro Ile Gln Thr
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<213> Homo sapiens

<400> 16743

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Arg Met Glu Phe Pro Asn Pro Asn Lys Pro Glu Gly Thr Ala Gly Asp
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Gln Gly Ile Phe His His Tyr Leu Asn His Ile Arg Gln Thr Leu Pro
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		195					200					205			
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Ser Gly Ile Gln Lys Glu Ile Lys Tyr Ser Asp Ser Leu Leu Gln Met
            340                 345                 350
Lys Ala Lys Glu Tyr Glu Leu Leu Ala Lys Glu Phe Asn Ser Leu His
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Ile Ser Asn Lys Asp Gly Cys Gln Leu Lys Glu Asn Arg Ala Lys Glu
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<400> 16747

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<211> 1398
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (125)..(436)

<400> 16762
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<210> 16763
<211> 104
<212> PRT
<213> Homo sapiens

<400> 16763
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20 25 30
Thr Tyr Asn His Cys Met Glu Ser Val Leu Ala Ala Glu His Arg Arg
35 40 45
Ser Leu Glu Gln Val Ile Val Gln Ile Gly Phe Gln Thr Ser Ser Trp
50 55 60
Leu Glu Phe Tyr Gln Leu Gln Cys Gly Ser Ser Phe Glu Ala Leu Ile
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His Asn Ser Ser Phe Leu Gly Val Gly Leu Gly Gly Cys Cys His Cys
85 90 95
Ser Phe Pro Ser Cys Lys Cys Arg
100

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<211> 2234
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (196)..(1035)

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0000000-0000000

0060204-0060204

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ataaacaaac taacagcaga agctattcag acacccctga aatctgccaa aacacgaaag 540
gtaatacagg tagatgaaat gatagtggaa gaggaagaag aagaagaaaa tgaacgtaag 600
aatcttcaaa ctgcaagagt caaaaggtgt cctccatcca agaagagaac tcagtccata 660
caaggaaaag gaaaagggaa aaggtcaagc cgtgctaaca ctgttacccc agccgtgggc 720
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<211> 280
<212> PRT
<213> Homo sapiens

<400> 16765
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Glu Ile Arg Ile Lys Gln Ile Glu Ser Asp Arg Gln Asn Leu Leu Lys
35 40 45
Glu Val Asp Asn Leu Tyr Asn Ile Glu Ile Leu Arg Leu Pro Lys Ala
50 55 60

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Leu Arg Glu Met Asn Trp Leu Asp Tyr Phe Ala Leu Gly Gly Asn Lys
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Gln Ala Leu Glu Glu Ala Ala Thr Ala Asp Leu Asp Ile Thr Glu Ile
                 85                  90                  95
Asn Lys Leu Thr Ala Glu Ala Ile Gln Thr Pro Leu Lys Ser Ala Lys
            100                 105                 110
Thr Arg Lys Val Ile Gln Val Asp Glu Met Ile Val Glu Glu Glu Glu
        115                 120                 125
Glu Glu Glu Asn Glu Arg Lys Asn Leu Gln Thr Ala Arg Val Lys Arg
    130                 135                 140
Cys Pro Pro Ser Lys Lys Arg Thr Gln Ser Ile Gln Gly Lys Gly Lys
145                 150                 155                 160
Gly Lys Arg Ser Ser Arg Ala Asn Thr Val Thr Pro Ala Val Gly Arg
                165                 170                 175
Leu Glu Val Ser Met Val Lys Pro Thr Pro Gly Leu Thr Pro Arg Phe
            180                 185                 190
Asp Ser Arg Val Phe Lys Thr Pro Gly Leu Arg Thr Pro Ala Ala Gly
        195                 200                 205
Glu Arg Ile Tyr Asn Ile Ser Gly Asn Gly Ser Pro Leu Ala Asp Ser
    210                 215                 220
Lys Glu Ile Phe Leu Thr Val Pro Val Gly Gly Gly Glu Ser Leu Arg
225                 230                 235                 240
Leu Leu Ala Ser Asp Leu Gln Arg His Ser Ile Ala Gln Leu Asp Pro
                245                 250                 255
Glu Ala Leu Gly Asn Ile Lys Lys Leu Ser Asn Arg Leu Ala Gln Ile
            260                 265                 270
Cys Ser Ser Ile Arg Thr His Lys
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<210> 16766
<211> 2467
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (26)..(1351)

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<211> 442
<212> PRT
<213> Homo sapiens

<400> 16767
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20 25 30
Pro Glu Pro Ala Gly Arg Arg Ala Ala Leu Tyr Val His Trp Pro Tyr
35 40 45

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0950245 0950245

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Arg Leu Glu Glu Ala Ala Met Gln Lys Cys Leu Val Thr Glu Ala Gln
 65                  70                  75                  80
Thr Leu Leu Arg Leu Ser Gly Val Gln Arg Val Glu Ser Val Phe Phe
                 85                  90                  95
Gly Gly Gly Thr Pro Ser Leu Ala Ser Pro His Thr Val Ala Ala Val
            100                 105                 110
Leu Glu Ala Val Ala Gln Ala Ala His Leu Pro Ala Asp Leu Glu Val
        115                 120                 125
Thr Leu Glu Ala Asn Pro Thr Ser Ala Pro Gly Ser Arg Leu Ala Glu
    130                 135                 140
Phe Gly Ala Ala Gly Val Asn Arg Leu Ser Ile Gly Leu Gln Ser Leu
145                 150                 155                 160
Asp Asp Thr Glu Leu Arg Leu Leu Gly Arg Thr His Ser Ala Cys Asp
                165                 170                 175
Ala Leu Arg Thr Leu Ala Glu Ala Arg Gly Leu Phe Pro Gly Arg Val
            180                 185                 190
Ser Val Asp Leu Met Leu Gly Leu Pro Ala Gln Gln Val Gly Pro Trp
        195                 200                 205
Leu Gly Gln Leu Gln Glu Leu Leu His His Cys Asp Asp His Leu Ser
    210                 215                 220
Leu Tyr Gln Leu Ser Leu Glu Arg Gly Thr Ala Leu Phe Ala Gln Val
225                 230                 235                 240
Gln Arg Gly Ala Leu Pro Ala Pro Asp Pro Glu Leu Ala Ala Glu Met
                245                 250                 255
Tyr Gln Arg Gly Arg Ala Val Leu Arg Glu Ala Gly Phe His Gln Cys
            260                 265                 270
Glu Val Ser Asn Phe Ala Arg Asn Gly Ala Leu Ser Thr His Asn Trp
        275                 280                 285
Thr Tyr Trp Gln Cys Gly Gln Tyr Leu Gly Val Gly Pro Gly Ala His
    290                 295                 300
Gly Arg Phe Met Pro Gln Gly Ala Gly Gly His Thr Arg Glu Ala Arg
305                 310                 315                 320
Ile Gln Thr Leu Glu Pro Asp Asn Trp Met Lys Glu Val Met Leu Phe
                325                 330                 335
Gly His Gly Thr Arg Lys Arg Val Pro Leu Gly Arg Leu Glu Leu Leu
            340                 345                 350
Glu Glu Val Leu Ala Leu Gly Leu Arg Thr Asp Val Gly Ile Thr His
        355                 360                 365
Gln His Trp Gln Gln Phe Glu Pro Gln Leu Thr Leu Trp Asp Val Phe
    370                 375                 380
Gly Ala Asn Lys Glu Val Gln Glu Leu Leu Glu Arg Gly Leu Leu Gln
385                 390                 395                 400
Leu Asp His Arg Gly Leu Arg Cys Ser Trp Glu Gly Leu Ala Val Leu
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Asp Ser Leu Leu Leu Thr Leu Leu Pro Gln Leu Gln Glu Ala Trp Gln
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<211> 2902
<212> DNA
<213> Homo sapiens

<400> 16768
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gagtgttcag ccattgagcc attggtgatc attacctaga tccattaatt cattaggggt 180
tacaaatagt gccattccac ctggattcat ttatttgttg aaatacttct gtgaggagaa 240
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tgacagagca agactctgtc tc 2902

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<210> 16769
<211> 2771
<212> DNA
<213> Homo sapiens

<400> 16769
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agatagtttc ttaacttatg aacctaatat atcacggttt tattttaatg atataagtaa 180
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<210> 16782
<211> 2010
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

DOCID: WO 2005045060 A2

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<222> (15)..(674)

<400> 16783
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<212> PRT
<213> Homo sapiens

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35 40 45

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Pro Ala Ala Gly Ser Glu Asn Pro Ala Gln Arg Leu Pro Gly Gly Gln
 65                  70                  75                  80
Gly Leu Glu Arg Ala Gly Ala Glu Ala Ala Ala Arg Glu Ala Arg Arg
                 85                  90                  95
Asp Arg Leu Gly Pro Gly Ile Ala Ser Arg Glu Val Pro Arg Pro Trp
            100                 105                 110
Pro Arg Val Ala Ser Pro Leu Pro Arg Pro Pro Ala Arg Arg Gly Pro
        115                 120                 125
Gly Ile Ala Ser Arg Glu Val Pro Gly Pro Trp Pro Arg Val Ala Ser
    130                 135                 140
Pro Leu Pro Arg Pro Pro Ala Ser Pro Cys Pro Thr Ser Gln Thr Thr
145                 150                 155                 160
Ser Val Arg Arg Arg Leu Pro Ser Pro Gly Arg Ala Ala Leu Pro Arg
                165                 170                 175
Ser Pro Arg Pro Ala Leu Thr Pro Ala Pro Ala Arg Ser Pro Thr Arg
            180                 185                 190
Arg Gln Ser Thr Arg Arg Arg Ser Gly Ala Thr Thr Ser Cys Ser Gln
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<212> DNA
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<222> (586)..(1068)

<400> 16785

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<210> 16786
<211> 161
<212> PRT
<213> Homo sapiens

<400> 16786
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20 25 30
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35 40 45
Leu Gln Gln Lys Val Glu Glu Asn Glu His Leu Arg Leu Glu Leu Gln
50 55 60
Met Val Glu Thr Glu Arg Val Arg Leu Ser Leu Leu Glu Glu Lys Leu
65 70 75 80
Val Asp Val Leu Gln Leu Leu Gln Arg Leu Arg Asp Leu Asn Ile Ser
85 90 95
Lys Arg Ala Leu Gly Lys Ile Leu Leu Ser Thr Leu Asp Ala Phe Arg
100 105 110
Asp Pro Thr His Glu Gly Arg Pro Ser Pro Ala Ala Ile Leu Asp Ala
115 120 125
Leu His Gln Ala Leu Ala Ala Cys Gln Leu Leu Arg Arg Gln Pro Ser
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Ala Pro Ala Ser Ala Ala Ala Ala Leu Thr Asn Pro Leu Leu Val Ser
145 150 155 160
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<210> 16787
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (725)..(1120)

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<210> 16788

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<211> 132
<212> PRT
<213> Homo sapiens

<400> 16788
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Arg Leu Met Thr Ile Ser His Thr Thr Thr Gln Lys His Leu Gln Cys
             20                  25                  30
Tyr Phe Cys Ser Gln Ser Lys Thr Gln Lys Leu Ser Val Pro Leu Ser
         35                  40                  45
Ala Gly Ser Ser Gln Lys Glu His Thr Ala Pro Arg His Phe Tyr Asn
     50                  55                  60
Tyr Arg Val Trp Ile Asp Arg Ala Gly Ala Ser Pro Ser Ser Thr Ser
 65                  70                  75                  80
Thr Arg Thr Ile Ile Leu Ser Phe Thr Leu Ile Lys Thr His Gln Asn
                 85                  90                  95
Pro Lys Gly Ile Ser Leu Val Val Lys Val Ser Met Asn Ile Asn His
            100                 105                 110
Thr Thr Ser Leu Thr Arg Asn Ile Arg Asn Pro Ser Arg Thr Arg Asp
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<210> 16789
<211> 1840
<212> DNA
<213> Homo sapiens

<400> 16789
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<210> 16790
<211> 1989
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (58)..(546)

<400> 16790
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<210> 16791
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<212> PRT
<213> Homo sapiens

<400> 16791
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Phe Pro Ala Cys Ser Val Gly Gly Ile Pro Gly Ser Lys Lys Trp Phe
65 70 75 80
Phe Ala Val Gln Ala Ile Tyr Gly Phe Tyr Gln Phe Cys Ser Ser Asp
85 90 95
Trp Gln Glu Ile His Phe Asp Thr Glu Lys Asp Lys Ile Glu Asp Val
100 105 110
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115 120 125
Glu Glu Asp Ser Asn Ser Arg Glu Ser Leu Ser Leu Ala Glu Tyr Ala
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<211> 101
<212> PRT

<213> Homo sapiens

<400> 16793

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<400> 16794

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Thr Ser Leu Val Phe Cys Phe Ser Val Gly Asp Thr Gly Pro Arg Arg
50 55 60
Leu Gly Ser Pro Gly Cys Cys Gly Pro Cys Ala Pro Leu Tyr Leu Pro
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<210> 16796
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<212> DNA
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<220>
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Lys His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Arg Glu
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<212> PRT
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35 40 45
Phe Gly His Glu Val Ile Val Met Asp Met Asp Pro Phe Leu His Cys
50 55 60
Val Ile Pro Asn Phe Ile Gln Ser Gln Asp Phe Leu Glu Gly Leu Gln
65 70 75 80
Lys Glu Leu Met Asn Leu Asp Phe His Glu Lys Tyr Asn Asp Leu Tyr
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Ser Thr Leu Arg Lys Ile Leu Phe Glu Asp Phe Arg Ser Trp Leu Ser

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Lys Tyr Glu Phe Thr Asp Ala Leu Leu Cys His Asp Asp Glu Leu Glu
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Gly Arg Arg Ile Ala Phe Ile Leu Tyr Leu Val Pro Pro Trp Asp Arg
                165                 170                 175
Ser Met Gly Gly Thr Leu Asp Leu Tyr Ser Ile Asp Glu His Phe Gln
            180                 185                 190
Pro Lys Gln Ile Val Lys Ser Leu Ile Pro Ser Trp Asn Lys Leu Val
        195                 200                 205
Phe Phe Glu Val Ser Pro Val Ser Phe His Gln Val Ser Glu Val Leu
    210                 215                 220
Ser Glu Glu Lys Ser Arg Leu Ser Ile Ser Gly Trp Phe His Gly Pro
225                 230                 235                 240
Ser Leu Thr Arg Pro Pro Asn Tyr Phe Glu Pro Pro Ile Pro Arg Ser
                245                 250                 255
Pro His Ile Pro Gln Asp His Glu Ile Leu Tyr Asp Trp Ile Asn Pro
            260                 265                 270
Thr Tyr Leu Asp Met Asp Tyr Gln Val Gln Ile Gln Glu Glu Phe Glu
        275                 280                 285
Glu Ser Ser Glu Ile Leu Leu Lys Glu Phe Leu Lys Pro Glu Lys Phe
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Thr Lys Val Cys Glu Ala Leu Glu His Gly His Val Glu Trp Ser Ser
305                 310                 315                 320
Arg Gly Pro Pro Asn Lys Arg Phe Tyr Glu Lys Ala Glu Glu Ser Lys
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Leu Pro Glu Ile Leu Lys Glu Cys Met Lys Leu Phe Arg Ser Glu Ala
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Leu Phe Leu Leu Leu Ser Asn Phe Thr Gly Leu Lys Leu His Phe Leu
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Ala Pro Ser Glu Glu Asp Glu Met Asn Asp Lys Lys Glu Ala Glu Thr
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Asn Asn Gln Met Ala Ile Ser Asn Asn Ser Gln Gln Ser Asn Glu Gln
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Thr Asp Pro Glu Pro Glu Glu Asn Glu Thr Lys Lys Glu Ser Ser Val
            420                 425                 430
Pro Met Cys Gln Gly Glu Leu Arg His Trp Lys Thr Gly His Tyr Thr
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Leu Ile His Asp His Ser Lys Ala Glu Phe Ala Leu Asp Leu Ile Leu
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Tyr Cys Gly Cys Glu Gly Trp Glu Pro Glu Tyr Gly Gly Phe Thr Ser
465                 470                 475                 480
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<211> 335
<212> PRT
<213> Homo sapiens

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Met Asn Glu Val Met Ala Glu Leu Ala Lys Glu Leu Pro Gln Val Ser
    50                  55                  60
Phe Val Arg Leu Glu Ala Glu Gly Val Pro Glu Val Ser Glu Lys Tyr
65                  70                  75                  80
Glu Ile Ser Ser Val Pro Thr Phe Leu Phe Phe Lys Asn Ser Gln Lys
                85                  90                  95
Ile Asp Arg Leu Asp Gly Ala His Ala Pro Glu Leu Thr Lys Lys Val
            100                 105                 110
Gln Arg His Ala Ser Ser Gly Ser Phe Leu Ser Ser Ala Asn Glu His
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Leu Lys Glu Asp Leu Asn Leu Arg Leu Lys Lys Leu Thr His Ala Ala
    130                 135                 140
Pro Cys Met Leu Phe Met Lys Gly Thr Pro Gln Glu Pro Arg Cys Gly
145                 150                 155                 160
Phe Ser Lys Gln Met Val Glu Ile Leu His Lys His Asn Ile Gln Phe
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Ser Ser Phe Asp Ile Phe Ser Asp Glu Glu Val Arg Gln Gly Leu Lys
            180                 185                 190
Ala Tyr Ser Ser Trp Pro Thr Tyr Pro Gln Leu Tyr Val Ser Gly Glu
        195                 200                 205
Leu Ile Gly Gly Leu Asp Ile Ile Lys Glu Leu Glu Ala Ser Glu Glu
    210                 215                 220
Leu Asp Thr Ile Cys Pro Lys Ala Pro Lys Leu Glu Glu Arg Leu Lys
225                 230                 235                 240
Val Leu Thr Asn Lys Ala Ser Val Met Leu Phe Met Lys Gly Asn Lys
                245                 250                 255
Gln Glu Ala Lys Cys Gly Phe Ser Lys Gln Ile Leu Glu Ile Leu Asn
            260                 265                 270
Ser Thr Gly Val Glu Tyr Glu Thr Phe Asp Ile Leu Glu Asp Glu Glu
        275                 280                 285
Val Arg Gln Gly Leu Lys Ala Tyr Ser Asn Trp Pro Thr Tyr Pro Gln
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Leu Tyr Val Lys Gly Glu Leu Val Gly Gly Leu Asp Ile Val Lys Glu
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<213> Homo sapiens

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09/503,450 - 02/14/2000

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<212> PRT
<213> Homo sapiens

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35 40 45
Asp Thr Asp Ser His Leu Glu Cys Leu Ser Leu Phe Gln Ser Val His
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65 70 75 80
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<213> Homo sapiens

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35 40 45
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50 55 60
Ser Ala Arg Ala Trp Ser Leu Arg Arg Pro Gly Pro Gly Ser Pro Ala
65 70 75 80
His Ser Gly Gly Val Gln Thr Arg Glu Asn Trp Ile Ala Tyr Pro Leu
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<212> DNA
<213> Homo sapiens

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<211> 258
<212> PRT
<213> Homo sapiens

<400> 16818
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Val Lys Leu Lys Tyr Cys Gly Val His Phe Asn Ser Gln Ala Ile Ala
 65                  70                  75                  80
Pro Thr Ile Glu Gln Ile Asp Gln Ser Phe Gly Ala Thr His Pro Gly
                 85                  90                  95
Gly Lys Pro Ser Pro Ser Asp Ser Ser Gly His Gln Trp Gln Phe Ile
            100                 105                 110
Ala Ile Asn Leu Pro Gly Ser Ala Ile Pro Pro His Phe Leu Glu Ser
        115                 120                 125
Gly Ser His Arg Ile Val Gly Leu Val Leu Gly Cys Glu Gly Asn Ile
    130                 135                 140
Leu Pro Leu Val Phe Asn Leu Val Gly Gln Phe Arg Asn Lys Pro Gln
145                 150                 155                 160
Gly Arg Cys Cys Gln Ser Leu Leu Pro Ala Arg Leu Val Tyr Val Ser
                165                 170                 175
His Phe Arg Cys Gln Ser Thr Met Leu Phe Ser Ser Pro Pro Pro Pro
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Thr Val Tyr Asn Ser Ala Glu Gln Leu Phe His Leu Asn Phe Arg Gly
        195                 200                 205
Leu Ser Phe Ser Phe Gln Leu Asp Ser Trp Thr Glu Ala Pro Lys Tyr
    210                 215                 220
Glu Pro Asn Phe Ala His Gly Leu Ala Ser Leu Gln Ile Pro His Gly
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<213> Homo sapiens

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<211> 1683
<212> DNA
<213> Homo sapiens

<400> 16820
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aag 1683

<210> 16821
<211> 2784
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (170)..(994)

<400> 16821
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US 2005/0260200 A1

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Cys Pro Gly Pro Ile Phe Phe Lys Glu Gly Lys Ile Lys Leu Ile Gln
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Phe Tyr Leu Lys Lys Lys Lys Lys Asn Gly Gln Ala Gln Trp Leu Thr
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<400> 16849

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09/09/2004 09:50:03 Page 9 of 16

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Gly Gly Gly Arg Ser Gly Pro Ser Pro Val Leu Arg Gly Cys Trp Gly
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50 55 60
Glu Ser Leu His Phe Leu Val Gly Phe Cys Leu Gln Glu Ala Lys Pro
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Thr Gln Trp Phe Leu Trp Val Ser Cys Thr Trp Leu Ser Ala Leu Gly
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Lys Arg Leu Gly Leu Leu Ala Val Leu Cys Pro Leu Asp Cys Gln Val
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09/22/2006 09:45:09

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<213> Homo sapiens

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65 70 75 80
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Ser Tyr Ile Gln Trp Leu Phe Pro Leu Arg Glu Pro Gly Val Asn Trp
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His Ala Lys Pro Leu Thr Leu Arg Glu Val Glu Val Phe Lys Ser Ser
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35 40 45
Val Gly Gly Ser Ser Glu Val Gly Ser Ser Arg Pro Gly Ser Pro Thr
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Trp Arg Asn Pro Val Ser Thr Lys Asn Thr Lys Lys Lys Lys Ile Ser

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09/2006 09:45 FAX 2026

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09/15/2006 09:50:56 PM

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09/2009 09:45:03 PAGE 10/20 RCVD at 9/2/2009 9:45:03 PM [Eastern Daylight Time]

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<212> PRT
<213> Homo sapiens

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Leu Ser Ala Asp Ser Ala Glu Ala His Ser Leu Asn Val Asn Arg Phe
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Ser Pro Ala Asn Tyr Asp Gln Ala His Leu His Pro His Leu Phe Ser
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Asp Gln Ser Arg Gly Ser Pro Ser Ser Tyr Ser Pro Ser Thr Gly Val
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Pro Thr Phe Pro Pro Ser Ala His Gln Gln Pro Pro His Tyr Thr Thr
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                245                 250                 255
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            260                 265                 270
Leu Met His Ser Glu Ser Met Glu Glu Asp Cys Ser Cys Glu Gly Ala
        275                 280                 285
Lys Asp Gly Phe Gln Asp Ser Lys Ser Ser Ser Thr Leu Thr Lys Gly
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Cys His Asp Ser Pro Leu Leu Leu Ser Thr Gly Gly Pro Gly Asp Pro
305                 310                 315                 320
Glu Ser Leu Leu Gly Thr Val Ser His Ala Gln Glu Leu Gly Ile His
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Pro Tyr Gly His Gln Pro Thr Ala Ala Phe Ser Lys Asn Lys Val Pro
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Ser Arg Glu Pro Val Ile Gly Asn Cys Met Asp Arg Ser Ser Pro Gly
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Gln Ala Val Glu Leu Pro Asp His Asn Gly Leu Gly Tyr Pro Ala Arg
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Pro Ser Val His Glu His His Arg Pro Arg Ala Leu Gln Arg His His
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Thr Ile Gln Asn Ser Asp Asp Ala Tyr Val Gln Leu Asp Asn Leu Pro
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Gly Met Ser Leu Val Ala Gly Lys Ala Leu Ser Ser Ala Arg Met Ser
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<400> 16938

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<213> Homo sapiens

<400> 16939

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			20					25				30			
Pro	Arg	Leu	Glu	Tyr	Ser	Asp	Ala	Ile	Thr	Ala	His	Cys	Ser	Leu	Asn
		35					40					45			
Leu	Leu	Gly	Ser	Asn	Asp	Pro	Pro	Thr	Leu	Ala	Ser	Pro	Arg	Phe	Gly
	50					55					60				
Ile	Thr	Gly	Val	Ser	His	Cys	Ile	Trp	Pro	Val	Lys	Ser	Ile	Ile	Tyr
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Pro Leu Phe Ser Pro Leu Ile Asn Arg Glu Val Gln Gln Phe His Pro
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Ala Val Arg Asn Ser Ser Glu Val Lys Phe Ala Val Gln Ala Phe Ala
115 120 125
Ala Leu Asn Ser Asn Asn Phe Val Arg Phe Phe Lys Leu Val Gln Ser
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<212> DNA
<213> Homo sapiens

<220>
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<222> (2)..(871)

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<212> PRT
<213> Homo sapiens

<400> 16941

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Gln	Ala	Glu	Phe	Leu	Cys	Val	Val	Ser	Lys	Glu	Leu	His	Ser	Thr	Pro
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		195					200					205			
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Pro	His	Pro	Leu	Arg	Pro	Glu	Ala	Glu	Leu	Ala	Val	Arg	Ala	Ser	Pro
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<213> Homo sapiens

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<222> (84)..(965)

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<212> PRT
<213> Homo sapiens

<400> 16943

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Arg	Arg	Val	Val	Thr	Phe	Ser	Cys	Cys	Arg	Met	Pro	Pro	Ser	His	Glu
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Leu	Asp	His	Gln	Arg	Leu	Leu	Glu	Tyr	Leu	Lys	Tyr	Thr	Leu	Asp	Gln
	50					55					60				
Tyr	Val	Glu	Asn	Asp	Tyr	Thr	Ile	Val	Tyr	Phe	His	Tyr	Gly	Leu	Asn
65					70					75					80
Ser	Arg	Asn	Lys	Pro	Ser	Leu	Gly	Trp	Leu	Gln	Ser	Ala	Tyr	Lys	Glu
				85					90					95	
Phe	Asp	Arg	Lys	Tyr	Lys	Lys	Asn	Leu	Lys	Ala	Leu	Tyr	Val	Val	His
			100					105					110		
Pro	Thr	Ser	Phe	Ile	Lys	Val	Leu	Trp	Asn	Ile	Leu	Lys	Pro	Leu	Ile
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Ser	His	Lys	Phe	Gly	Lys	Lys	Val	Ile	Tyr	Phe	Asn	Tyr	Leu	Ser	Glu
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Leu	Arg	Tyr	Asp	Glu	Lys	Leu	Gln	Ser	Leu	His	Glu	Gly	Arg	Thr	Pro
				165					170					175	
Pro	Pro	Thr	Lys	Thr	Pro	Pro	Pro	Arg	Pro	Pro	Leu	Pro	Thr	Gln	Gln
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Phe	Gly	Val	Ser	Leu	Gln	Tyr	Leu	Lys	Asp	Lys	Asn	Gln	Gly	Glu	Leu
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Asp Tyr Gly Asp Ile His Ile Pro Ala Val Ile Leu Lys Thr Phe Leu
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<212> DNA
<213> Homo sapiens

<400> 16944

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Docket No. 50570-2005

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Ala Leu Ala Ser Arg Val Ala Gly Ile Ala Gly Thr Cys His His Ala
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Trp Leu Val Phe Val Phe Leu Val Glu Thr Met Phe Arg Arg Val Asp
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Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Gly Pro Leu Ala Ser Ala
85 90 95
Ser Gln Gly Ala Gly Ile Ile Gly Val Ser His Cys Ala Gln Pro His
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Ser Cys Ile Leu Thr Leu Pro Leu Pro Leu Pro Leu Lys Leu Val Pro
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<212> DNA
<213> Homo sapiens

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<222> (1135)..(1719)

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<212> PRT
<213> Homo sapiens

<400> 16965

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Arg Pro Gln Phe His Ala Thr Trp Pro Val Pro Gln Ser Ser Ser Gln
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Leu Gly Ser Ser Trp Leu Pro Gln Ser Gly Ile Cys Glu Gln Arg Pro
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Asp Gly Ser His Gly Val Pro Leu Lys Pro Asp Met Glu Gly Asp Ser
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<212> DNA
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<400> 16966

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (695)..(1579)

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<212> PRT
<213> Homo sapiens

<400> 16968
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Phe Leu Ser Gly Met Glu Ala Ala Pro Arg Thr Leu Ala Ala His Pro
50 55 60
Pro Leu Pro Leu Leu Pro Pro Ala Met Gly Thr Glu Pro Ala Pro Ser
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Ala Pro Glu Ala Leu His Ser Leu Pro Gly Val Ser Leu Ser Leu Glu
85 90 95
Asn Arg Glu Leu Trp Lys Glu Phe Ser Ser Val Gly Thr Glu Met Ile
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Ile Thr Lys Ala Gly Arg Arg Met Phe Pro Ala Cys Arg Val Ser Val
115 120 125

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Ser Gly Lys Ala Glu Pro Arg Leu Pro Asp Arg Val Tyr Ile His Pro
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Asp Ser Pro Ala Thr Gly Ala His Trp Met Arg Gln Pro Val Ser Phe
            180                 185                 190
His Arg Val Lys Leu Thr Asn Ser Thr Leu Asp Pro His Gly His Leu
        195                 200                 205
Ile Leu His Ser Met His Lys Tyr Gln Pro Arg Ile His Leu Val Arg
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225                 230                 235                 240
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<400> 16969

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<212> DNA
<213> Homo sapiens

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<222> (1708)..(2166)

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<400> 16971

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DOCKET ALARM

0002250-0950

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Val Tyr Tyr Asn Glu Ser Ser Ser Gln Lys Tyr Val Pro Arg Ala Ala
     50                  55                  60
Leu Val Asp Leu Glu Pro Gly Thr Met Asp Ser Val Arg Ser Gly Pro
 65                  70                  75                  80
Phe Gly Gln Leu Phe Arg Pro Asp Asn Phe Val Phe Gly Gln Thr Gly
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Ala Gly Asn Asn Trp Ala Lys Gly His Tyr Thr Glu Gly Ala Glu Leu
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Val Asp Ala Val Leu Asp Val Val Arg Lys Glu Cys Glu His Cys Asp
        115                 120                 125
Cys Leu Gln Gly Phe Gln Leu Thr His Ser Leu Gly Gly Gly Thr Gly
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Ser Gly Met Gly Thr Leu Leu Ile Ser Lys Ile Arg Glu Glu Phe Pro
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Asp Arg Ile Met Asn Thr Phe Ser Val Met Pro Ser Pro Lys Val Ser
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Arg Phe Pro Gly Gln Leu Asn Ala Asp Leu Arg Lys Leu Ala Val Asn
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Met Val Pro Phe Pro Arg Leu His Phe Phe Met Pro Gly Phe Ala Pro
            260                 265                 270
Leu Thr Ser Arg Gly Ser Gln Gln Tyr Arg Ala Leu Thr Val Pro Glu
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Leu Thr Gln Gln Met Phe Asp Ala Arg Asn Met Met Ala Ala Cys Asp
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Pro Arg His Gly Arg Tyr Leu Thr Val Ala Thr Val Phe Arg Gly Pro
305                 310                 315                 320
Met Ser Met Lys Glu Val Asp Glu Gln Met Leu Ala Ile Gln Ser Lys
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Asn Ser Ser Tyr Phe Val Glu Trp Ile Pro Asn Asn Val Lys Val Ala
            340                 345                 350
Val Cys Asp Ile Pro Pro Arg Gly Leu Lys Met Ala Ser Thr Phe Ile
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Gly Asn Ser Thr Ala Ile Gln Glu Leu Phe Lys Arg Ile Ser Glu Gln
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Phe Ser Ala Met Phe Arg Arg Lys Ala Phe Leu His Trp Phe Thr Gly
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Glu Gly Met Asp Glu Met Glu Phe Thr Glu Ala Glu Ser Asn Met Asn
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DOCKET ALARM

0050205.0050-00 US 2006-05-30

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<212> PRT
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Arg Val Glu Thr Phe Ser Ser Leu Lys Trp Ala Gly Lys Pro Phe Glu
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Leu Ser Pro Leu Val Cys Ala Lys Tyr Gly Trp Val Thr Val Glu Cys
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Gln Pro Ala Phe Asp Phe Asp Arg Tyr Lys Gln Arg Cys Ala Glu Leu
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Gly Asp Thr Pro Gly Leu Glu Val Pro Ser Ser Pro Leu Arg Lys Ala
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Lys Arg Ala Arg Leu Cys Ser Ser Ser Ser Ser Asp Thr Ser Ser Arg
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<400> 17004

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<212> DNA
<213> Homo sapiens

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<211> 1535
<212> DNA
<213> Homo sapiens

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Docket No. 0609.0050000

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Doc No 0056703 - 05/02/2008

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Lys Glu Ala Ala His Leu Leu Asn Asp Ala Leu Ala Ile Arg Glu Lys
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Thr Leu Gly Lys Asp His Pro Ala Val Ala Ala Thr Leu Asn Asn Leu
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Ala Val Leu Tyr Gly Lys Arg Gly Lys Tyr Lys Glu Ala Glu Pro Leu
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Cys Arg Arg Ala Leu Glu Ile Arg Glu Lys Val Leu Gly Lys Phe His
305                 310                 315                 320
Pro Asp Val Ala Lys Gln Leu Ser Asn Leu Ala Leu Leu Cys Gln Asn
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Gln Gly Lys Ala Glu Glu Val Glu Tyr Tyr Tyr Arg Arg Ala Leu Glu
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Ile Tyr Ala Thr Arg Leu Gly Pro Asp Asp Pro Asn Val Ala Lys Thr
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Glu Arg Glu Glu Ser Lys Asp Lys Arg Arg Asp Ser Ala Pro Tyr Gly
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Leu Glu Ala Ala His Thr Leu Glu Asp Cys Ala Ser Arg Asn Arg Lys
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Gln Gly Leu Asp Pro Ala Ser Gln Thr Lys Val Val Glu Leu Leu Lys
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Asp Gly Ser Gly Arg Arg Gly Asp Arg Arg Ser Ser Arg Asp Met Ala
            500                 505                 510
Gly Gly Ala Gly Pro Arg Ser Glu Ser Asp Leu Glu Asp Val Gly Pro
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Thr Ala Glu Trp Asn Gly Asp Gly Ser Gly Ser Leu Arg Arg Ser Gly
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Ser Phe Gly Lys Leu Arg Asp Ala Leu Arg Arg Ser Ser Glu Met Leu
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Val Lys Lys Leu Gln Gly Gly Thr Pro Gln Glu Pro Pro Asn Pro Arg
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<213> Homo sapiens

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<211> 511
<212> PRT
<213> Homo sapiens

<400> 17062

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Cys	Asp	Val	Thr	Val	Arg	Ile	Arg	Glu	Ala	Ser	Leu	Arg	Ala	His	Arg
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Arg	Gln	Leu	Val	Glu	Phe	Leu	Tyr	Ser	Gly	Ser	Leu	Val	Val	Ala	Gln
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Ala Pro Ala Pro Pro Pro Ala Phe Tyr Pro Thr Leu Gln Pro Glu Ala
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Ala Pro Ser Thr Gln Leu Gly Glu Val Pro Ala Pro Ser Ala Ala Pro
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Thr Thr Ala Pro Ser Gly Thr Pro Ala Arg Thr Pro Gly Ala Glu Pro
385                 390                 395                 400
Pro Thr Tyr Glu Cys Ser His Cys Arg Lys Thr Phe Ser Ser Arg Lys
                405                 410                 415
Asn Tyr Thr Lys His Met Phe Ile His Ser Gly Glu Lys Pro His Gln
            420                 425                 430
Cys Ala Val Cys Trp Arg Ser Phe Ser Leu Arg Asp Tyr Leu Leu Lys
        435                 440                 445
His Met Val Thr His Thr Gly Val Arg Ala Phe Gln Cys Ala Val Cys
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Ala Lys Arg Phe Thr Gln Lys Ser Ser Leu Asn Val His Met Arg Thr
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Met Glu Tyr Leu Ile Lys Thr Gly Ser Glu Arg Val Ser Gln Gln Cys
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Lys Glu Asn Met Tyr Ala Val Gln Thr Leu Lys Asp Phe Gln Tyr Val
            100                 105                 110
Asp Arg Asp Gly Lys Asp Gln Gly Val Asn Val Arg Glu Lys Ala Lys
        115                 120                 125
Gln Leu Val Ala Leu Leu Arg Asp Glu Asp Arg Leu Arg Glu Glu Arg
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Trp Arg Pro Ala Ala Pro Ala Gly Pro Ser Val Asp Pro Trp Gly Gly
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Thr Pro Ala Pro Ala Ala Gly Glu Gly Pro Thr Pro Asp Pro Trp Gly
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Pro Asp Glu Phe Ser Asp Phe Asp Arg Leu Arg Thr Ala Leu Pro Thr
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Thr Leu Asn Gln Leu Arg Leu Ser Pro Val Pro Pro Val Pro Gly Ala
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<212> DNA

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<213> Homo sapiens

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<400> 17076

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Pro	Arg	Pro	Tyr	Ala	Cys	Pro	Leu	Cys	Pro	Lys	Ala	Tyr	Lys	Thr	Ala
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Pro	Glu	Leu	Arg	Ser	His	Gly	Arg	Ser	His	Thr	Gly	Glu	Lys	Pro	Phe
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Phe	Ala	Asp	Pro	Ser	Val	Phe	Arg	Lys	His	Arg	Arg	Thr	His	Ala	Gly
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Cys Gly Lys Gly Phe Thr Gln Leu Ser Ser Tyr Gln Ser His Glu Arg
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Thr His Ser Gly Glu Lys Pro Phe Leu Cys Pro Arg Cys Gly Arg Met
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465                 470                 475                 480
Val Glu His Val Glu Cys Gln Asp Ala Gly Val Arg Glu Ala Pro Gly
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Pro Leu Glu Gly Ala Gly Glu Ala Gly Gly Glu Glu Ala Asp Glu Lys
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Pro Pro Gln Phe Val Cys Arg Glu Cys Lys Glu Thr Phe Ser Thr Met
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Pro Cys Thr Gln Cys Gly Lys Ser Ile Ser Asp Arg Ala Gly Leu Arg
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Lys His Ser Arg Thr His Ser Ser Val Arg Pro Tyr Thr Cys Pro His
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Cys Pro Lys Ala Phe Leu Ser Ala Ser Asp Leu Arg Lys His Glu Arg
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<400> 17077

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<222> (12)..(1541)

<400> 17078

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Cys Arg Ala Glu Thr Cys Ala His Leu Gln Cys Phe Asp Ala Val Phe
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Tyr Leu Gln Met Asn Glu Lys Lys Pro Thr Trp Met Cys Pro Val Cys
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Lys Ile Leu Ser Glu Cys Glu Asp Ala Asp Glu Ile Glu Tyr Leu Val
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Gly Gly Gly Pro Val Gly Ser Met Glu Asn Gly Lys Pro Gly Ala Asp
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<212> DNA
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Leu Lys Thr Gln Glu Asp Glu Glu Glu Ile Ser Thr Ser Pro Gly Val
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Asp Leu Arg Lys Glu Met Glu Gln Leu Val Leu Asp Lys Lys Gln Glu
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Gln Gln Glu Leu Gln Glu Tyr Glu Val Val Thr Glu Ser Glu Lys Arg
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Pro Pro Val Ser Ile Ala Ile Arg Phe Thr Tyr Val Leu Gln Asp Trp
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Gln Gln Tyr Phe Trp Pro Gln Gln Pro Pro Asp Ile Asp Ala Leu Val
65                  70                  75                  80
Gly Gly Glu Val Gly Gly Leu Glu Phe Gly Lys Leu Pro Phe Gly Ala
                85                  90                  95
Cys Glu Asp Pro Ile Ser Glu Leu His Leu Ala Thr Thr Trp Pro His
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Leu Thr Glu Gly Ile Ile Val Asp Asn Asp Val Tyr Ser Asp Leu Asp
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Pro Ile Gln Ala Pro His Trp Ser Val Arg Val Arg Lys Ala Glu Asn
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Arg Arg Lys Glu Ser Thr Asp Glu Ile Leu Gly Arg Ser Ala Phe Glu
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Val His Thr Ala Lys Lys Lys Ile Arg Lys His Arg Gly Val Glu Glu
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Gly Lys Leu Thr Leu Leu His Asn Gly Glu Pro Leu Tyr Ile Pro Val
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Glu Val Leu Ala Lys Leu Gly Thr Ser Ala Glu Gly Ala His Leu Arg
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675 680 685
Lys Glu Asp Leu Glu Arg Phe Val Ser Cys Leu Leu Glu Gln Pro Glu
690 695 700
Val Leu Val Thr Gly Ala Gly Arg Gly His Ala Gly Arg Ile Ile His
705 710 715 720
Lys Leu Phe Val Asn Ala Gln Arg Ala Ala Ala Met Thr Pro Pro Glu
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<212> PRT
<213> Homo sapiens

<400> 17085

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Gly Ser Leu Arg Leu Gly Lys Ser Glu Ala Pro Glu Thr Pro Met Glu
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Glu Glu Ala Glu Leu Val Leu Thr Glu Lys Ser Ser Gly Thr Phe Leu
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Gln His Gly Val Cys Ser Val Leu Lys Gly Ser Glu Phe Met Phe Glu
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Lys Ala Pro Ala His His Pro Ala Ala Ile Ser Thr Ala Lys Phe Cys
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Phe Gly Thr Ala Val Thr Cys Leu Leu Ser Pro His Ser Gln Val Leu
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Thr Ala Ala Thr Gln Ser Leu Lys Glu Ile Leu Lys Glu Cys Val Ala
        435                 440                 445
Pro His Met Ala Asp Ile Gly Ser Val Thr Ser Ser Ala Ser Gly Pro
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Ala Gln Ser Val Ala Lys Met Phe Arg Ala Val Glu Glu Gly Leu Thr
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Tyr Lys Phe His Ala Ala Trp Ser Ser Val Leu Gln Leu Leu Cys Val
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Phe Phe Glu Ala Cys Gly Arg Gln Ala His Pro Val Met Arg Lys Cys
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Glu Val Val Leu Arg Ala Val Pro Leu Glu Ile Asp Gly Ser Glu Glu
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Thr Val Glu Ser Lys Ile Tyr Asp Thr Leu Gln Trp Gln Met Trp Thr
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Cys Gln Ala Glu Ala Asp Arg Ala Glu Val Ser Arg Phe Ala Lys Asn
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Phe Leu Pro Ile Leu Phe Asn Leu Tyr Gly Gln Pro Val Ala Ala Gly
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Asp Thr Pro Ala Pro Arg Arg Ala Val Leu Glu Thr Ile Arg Thr Tyr
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50 55 60
Gln Arg Gln Ala Cys Glu Asp Glu Leu Arg Glu Arg Ile Glu Lys Leu
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Glu Lys Arg Gln Ala Thr Asp Asp Ala Thr Leu Leu Ile Val Asn Arg
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Tyr Trp Ala Gln Leu Asp Glu Thr Val Glu Ala Pro Leu Arg Cys His
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Pro Ala Leu Ala Phe Val Val Ala Leu Gly Ala Gly Ser Ser Glu Glu
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Val Glu Leu Glu Leu Gln Gly Arg Met Glu Phe Ser Lys Ala Ala Val
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Glu Tyr Ser Glu Leu Gln Asp Lys Val Thr Ser Ala Glu Thr Lys Val
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Ala Gln Val Arg Lys Glu Tyr Glu Met Leu Arg Ile Glu Phe Glu Gln
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Asp Cys Pro Gly Pro Leu Glu Leu Gln Leu Ser Cys Glu Phe Leu Ser
     50                  55                  60
Asp Gln Ser Leu Glu Thr Leu Leu Asp Cys Leu Pro Gln Leu Pro Gln
 65                  70                  75                  80
Leu Ser Leu Leu Gln Leu Ser Gln Thr Gly Leu Ser Pro Lys Ser Pro
                 85                  90                  95
Phe Leu Leu Ala Asn Thr Leu Ser Leu Cys Pro Arg Val Lys Lys Val
            100                 105                 110
Asp Leu Arg Ser Leu His His Ala Thr Leu His Phe Arg Ser Asn Glu
        115                 120                 125
Glu Glu Glu Gly Val Cys Cys Gly Leu Ser Ala Asn Leu Leu Gly Asp
    130                 135                 140
Ser Gly Leu Arg Cys Leu Leu Glu Cys Leu Pro Gln Val Pro Ile Ser
145                 150                 155                 160
Gly Leu Leu Asp Leu Ser His Asn Ser Ile Ser Gln Glu Ser Ala Leu
                165                 170                 175
Tyr Leu Leu Glu Thr Leu Pro Ser Cys Pro Arg Val Arg Glu Ala Ser
            180                 185                 190
Val Asn Leu Gly Ser Glu Gln Ser Phe Arg Ile His Phe Ser Arg Glu
        195                 200                 205
Asp Gln Ala Gly Lys Thr Leu Arg Leu Ser Glu Cys Ser Phe Arg Pro
    210                 215                 220
Glu His Val Ser Arg Leu Ala Thr Gly Leu Ser Lys Ser Leu Gln Leu
225                 230                 235                 240
Thr Glu Leu Thr Leu Thr Gln Cys Cys Leu Gly Gln Lys Gln Leu Ala
                245                 250                 255
Ile Leu Leu Ser Leu Val Gly Arg Pro Ala Gly Leu Phe Ser Leu Arg
            260                 265                 270
Val Gln Glu Pro Trp Ala Asp Arg Ala Arg Val Leu Ser Leu Leu Glu
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09529450.030900

Val Cys Ala Gln Ala Ser Gly Ser Val Ala Glu Ile Ser Ile Ser Glu
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Thr Gln Gln Gln Leu Cys Val Gln Leu Glu Phe Pro Arg Gln Glu Glu
305 310 315 320
Asn Pro Glu Ala Val Ala Leu Arg Leu Ala His Cys Asp Leu Gly Ala
325 330 335
His His Ser Leu Leu Val Gly Gln Leu Met Glu Thr Cys Ala Arg Leu
340 345 350
Gln Gln Leu Ser Leu Ser Gln Val Asn Leu Cys Glu Asp Asp Asp Ala
355 360 365
Ser Ser Leu Leu Leu Gln Ser Leu Leu Leu Ser Leu Ser Glu Leu Lys
370 375 380
Thr Phe Arg Leu Thr Ser Ser Cys Val Ser Thr Glu Gly Leu Ala His
385 390 395 400
Leu Ala Ser Gly Leu Gly His Cys His His Leu Glu Glu Leu Asp Leu
405 410 415
Ser Asn Asn Gln Phe Asp Glu Glu Gly Thr Lys Ala Leu Met Arg Ala
420 425 430
Leu Glu Gly Lys Trp Met Leu Lys Arg Leu Asp Leu Ser His Leu Leu
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Gly Cys Cys His Leu Ser Glu Ala Leu Arg Ala Ala Thr Ser Leu Glu
485 490 495
Glu Leu Asp Leu Ser His Asn Gln Ile Gly Asp Ala Gly Val Gln His
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Leu Ala Thr Ile Leu Pro Gly Leu Pro Glu Leu Arg Lys Ile Asp Leu
515 520 525
Ser Gly Asn Ser Ile Ser Ser Ala Gly Gly Val Gln Leu Ala Glu Ser
530 535 540
Leu Val Leu Cys Arg Arg Leu Glu Glu Leu Met Leu Gly Cys Asn Ala
545 550 555 560
Leu Gly Asp Pro Thr Ala Leu Gly Leu Ala Gln Glu Leu Pro Gln His
565 570 575
Leu Arg Val Leu His Leu Pro Phe Ser His Leu Gly Pro Gly Gly Ala
580 585 590
Leu Ser Leu Ala Gln Ala Leu Asp Gly Phe Pro His Leu Glu Glu Ile
595 600 605
Ser Leu Ala Glu Asn Asn Leu Ala Gly Gly Val Leu Arg Phe Cys Met
610 615 620
Glu Leu Pro Leu Leu Arg Gln Ile Asp Leu Val Ser Cys Lys Ile Asp
625 630 635 640
Asn Gln Thr Ala Lys Leu Leu Thr Ser Ser Phe Thr Ser Cys Pro Ala
645 650 655
Leu Glu Val Ile Leu Leu Ser Trp Asn Leu Leu Gly Asp Glu Ala Ala
660 665 670

0 0 0 2 3 4 5 0 . 0 7 2 8 0 0

Ala Glu Leu Ala Gln Val Leu Pro Gln Met Gly Arg Leu Lys Arg Val
675 680 685
Asp Pro Glu Lys Asn Gln Ile Thr Ala Leu Gly Ala Trp Leu Leu Ala
690 695 700
Glu Gly Leu Ala Gln Gly Ser Ser Ile Gln Val Ile Arg Leu Trp Asn
705 710 715 720
Asn Pro Ile Pro Cys Asp Met Ala Gln His Leu Lys Ser Gln Glu Pro
725 730 735
Arg Leu Asp Phe Ala Phe Phe Asp Asn Gln Pro Gln Ala Pro Trp Gly
740 745 750
Thr

0050450-020800

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<211> 1613
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (40)..(1119)

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gctactgaag aggcagagga gtcgtttgaa tttgtggtgg tgtccctcac tgggcagacg 240
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cagatccttg ccagcctgca aggctgccgc agtgccaagg acaagactcg actggggaac 360
cagaacgcag ctctggctgt gcaggccgtc cgcaccgtcc gcggcaacag cttttgtatc 420
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<210> 17091
<211> 360
<212> PRT
<213> Homo sapiens

<400> 17091
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35 40 45
Thr Glu Glu Ala Glu Glu Ser Phe Glu Phe Val Val Ser Leu Thr
50 55 60
Gly Gln Thr Trp His Phe Glu Ala Ser Thr Ala Glu Glu Arg Glu Leu
65 70 75 80
Trp Val Gln Ser Val Gln Ala Gln Ile Leu Ala Ser Leu Gln Gly Cys
85 90 95
Arg Ser Ala Lys Asp Lys Thr Arg Leu Gly Asn Gln Asn Ala Ala Leu
100 105 110
Ala Val Gln Ala Val Arg Thr Val Arg Gly Asn Ser Phe Cys Ile Asp
115 120 125
Cys Asp Ala Pro Asn Pro Asp Trp Ala Ser Leu Asn Leu Gly Ala Leu
130 135 140
Met Cys Ile Glu Cys Ser Gly Ile His Arg His Leu Gly Ala His Leu
145 150 155 160
Ser Arg Val Arg Ser Leu Asp Leu Asp Asp Trp Pro Pro Glu Leu Leu
165 170 175
Ala Val Met Thr Ala Met Gly Asn Ala Leu Ala Asn Ser Val Trp Glu
180 185 190
Gly Ala Leu Gly Gly Tyr Ser Lys Pro Gly Pro Asp Ala Cys Arg Glu
195 200 205
Glu Lys Glu Arg Trp Ile Arg Ala Lys Tyr Glu Gln Lys Leu Phe Leu
210 215 220
Ala Pro Leu Pro Ser Ser Asp Val Pro Leu Gly Gln Gln Leu Leu Arg
225 230 235 240
Ala Val Val Glu Asp Asp Leu Arg Leu Leu Val Met Leu Leu Ala His
245 250 255
Gly Ser Lys Glu Glu Val Asn Glu Thr Tyr Gly Asp Gly Asp Gly Arg
260 265 270
Thr Ala Leu His Leu Ser Ser Ala Met Ala Asn Val Val Phe Thr Gln
275 280 285
Leu Leu Ile Trp Tyr Gly Val Asp Val Arg Ser Arg Asp Ala Arg Gly

0062945.0072800

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    290                 295                 300
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305                 310                 315                 320
Asp Ile Leu Ile Gln His Gly Cys Pro Gly Glu Gly Cys Gly Leu Ala
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Leu His Arg Ser Pro Ser Leu Leu
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0560150.0N3800

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<211> 3192
<212> DNA
<213> Homo sapiens

<220>
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<222> (96)..(2870)

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<210> 17093
<211> 925
<212> PRT
<213> Homo sapiens

<400> 17093

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			20					25				30			
Ser	Gly	Gly	Ser	Asn	Gly	Ser	Ser	Ser	Gly	Lys	Thr	Asp	Ser	Gly	Gly
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Gly	Ser	Arg	Arg	Ser	Leu	Leu	Leu	Asp	Lys	Ser	Ser	Ser	Arg	Gly	Gly
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Ser	Arg	Glu	Tyr	Asp	Thr	Gly	Gly	Gly	Ser	Ser	Ser	Ser	Arg	Leu	His
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Ser	Tyr	Ser	Ser	Pro	Ser	Thr	Lys	Asn	Ser	Ser	Gly	Gly	Gly	Glu	Ser
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Arg	Ser	Ser	Ser	Arg	Gly	Gly	Gly	Gly	Glu	Ser	Arg	Ser	Ser	Gly	Ala

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Lys Ile Ser Glu Leu Gly Ser Gln Leu Ser Asp Glu Ala Val Glu Asp
    130                 135                 140
Gly Leu Phe His Glu Phe Lys Arg Phe Gly Asp Val Ser Val Lys Ile
145                 150                 155                 160
Ser His Leu Ser Gly Ser Gly Ser Gly Asp Glu Arg Val Ala Phe Val
                165                 170                 175
Asn Phe Arg Arg Pro Glu Asp Ala Arg Ala Ala Lys His Ala Arg Gly
            180                 185                 190
Arg Leu Val Leu Tyr Asp Arg Pro Leu Lys Ile Glu Ala Val Tyr Val
        195                 200                 205
Ser Arg Arg Arg Ser Arg Ser Pro Leu Asp Lys Asp Thr Tyr Pro Pro
    210                 215                 220
Ser Ala Ser Val Val Gly Ala Ser Val Gly Gly His Arg His Pro Pro
225                 230                 235                 240
Gly Gly Gly Gly Gly Gln Arg Ser Leu Ser Pro Gly Gly Ala Ala Leu
                245                 250                 255
Gly Tyr Arg Asp Tyr Arg Leu Gln Gln Leu Ala Leu Gly Arg Leu Pro
            260                 265                 270
Pro Pro Pro Pro Pro Pro Leu Pro Arg Asp Leu Glu Arg Glu Arg Asp
        275                 280                 285
Tyr Pro Phe Tyr Glu Arg Val Arg Pro Ala Tyr Ser Leu Glu Pro Arg
    290                 295                 300
Val Gly Ala Gly Ala Gly Ala Ala Pro Phe Arg Glu Val Asp Glu Ile
305                 310                 315                 320
Ser Pro Glu Asp Asp Gln Arg Ala Asn Arg Thr Leu Phe Leu Gly Asn
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Leu Asp Ile Thr Val Thr Glu Ser Asp Leu Arg Arg Ala Phe Asp Arg
            340                 345                 350
Phe Gly Val Ile Thr Glu Val Asp Ile Lys Arg Pro Ser Arg Gly Gln
        355                 360                 365
Thr Ser Thr Tyr Gly Phe Leu Lys Phe Glu Asn Leu Asp Met Ser His
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385                 390                 395                 400
Lys Ile Gly Tyr Gly Lys Ala Thr Pro Thr Thr Arg Leu Trp Val Gly
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Gly Leu Gly Pro Trp Val Pro Leu Ala Ala Leu Ala Arg Glu Phe Asp
            420                 425                 430
Arg Phe Gly Thr Ile Arg Thr Ile Asp Tyr Arg Lys Gly Asp Ser Trp
        435                 440                 445
Ala Tyr Ile Gln Tyr Glu Ser Leu Asp Ala Ala His Ala Ala Trp Thr
    450                 455                 460
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465                 470                 475                 480
Asp Phe Ala Asp Thr Glu His Arg Tyr Gln Gln Gln Tyr Leu Gln Pro
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0050450-0050800

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        515                 520                 525
Tyr Arg Asp Arg Asp Arg Asp Leu Tyr Pro Asp Ser Asp Trp Val Pro
    530                 535                 540
Pro Pro Pro Pro Val Arg Glu Arg Ser Thr Arg Thr Ala Ala Thr Ser
545                 550                 555                 560
Val Pro Ala Tyr Glu Pro Leu Asp Ser Leu Asp Arg Arg Arg Asp Gly
                565                 570                 575
Trp Ser Leu Asp Arg Asp Arg Gly Asp Arg Asp Leu Pro Ser Ser Arg
            580                 585                 590
Asp Gln Pro Arg Lys Arg Arg Leu Pro Glu Glu Ser Gly Gly Arg His
        595                 600                 605
Leu Asp Arg Ser Pro Glu Ser Asp Arg Pro Arg Lys Arg His Cys Ala
    610                 615                 620
Pro Ser Pro Asp Arg Ser Pro Glu Leu Ser Ser Ser Arg Asp Arg Tyr
625                 630                 635                 640
Asn Ser Asp Asn Asp Arg Ser Ser Arg Leu Leu Leu Glu Arg Pro Ser
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Pro Ile Arg Asp Gly Arg Gly Ser Leu Glu Lys Ser Gln Gly Asp Lys
            660                 665                 670
Arg Asp Arg Lys Asn Ser Ala Ser Ala Glu Arg Asp Arg Lys His Arg
        675                 680                 685
Thr Thr Ala Pro Thr Glu Gly Lys Ser Pro Leu Lys Lys Glu Asp Arg
    690                 695                 700
Ser Asp Gly Ser Ala Pro Ser Thr Ser Thr Ala Ser Ser Lys Leu Lys
705                 710                 715                 720
Ser Pro Ser Gln Lys Gln Asp Gly Gly Thr Ala Pro Val Ala Ser Ala
                725                 730                 735
Ser Pro Lys Leu Cys Leu Ala Trp Gln Gly Met Leu Leu Leu Lys Asn
            740                 745                 750
Ser Asn Phe Pro Ser Asn Met His Leu Leu Gln Gly Asp Leu Gln Val
        755                 760                 765
Ala Ser Ser Leu Leu Val Glu Gly Ser Thr Gly Gly Lys Val Ala Gln
    770                 775                 780
Leu Lys Ile Thr Gln Arg Leu Arg Leu Asp Gln Pro Lys Leu Asp Glu
785                 790                 795                 800
Val Thr Arg Arg Ile Lys Val Ala Gly Pro Asn Gly Tyr Ala Ile Leu
                805                 810                 815
Leu Ala Val Pro Gly Ser Ser Asp Ser Arg Ser Ser Ser Ser Ser Ala
            820                 825                 830
Ala Ser Asp Thr Ala Thr Ser Thr Gln Arg Pro Leu Arg Asn Leu Val
        835                 840                 845
Ser Tyr Leu Lys Gln Lys Gln Ala Ala Gly Val Ile Ser Leu Pro Val
    850                 855                 860
Gly Gly Asn Lys Asp Lys Glu Asn Thr Gly Val Leu His Ala Phe Pro
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0960950 - 0960800

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865                 870                 875                 880
Pro Cys Glu Phe Ser Gln Gln Phe Leu Asp Ser Pro Ala Lys Ala Leu
                885                 890                 895
Ala Lys Ser Glu Glu Asp Tyr Leu Val Met Ile Ile Val Arg Ala Lys
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Leu Val Glu Gln Arg Met Lys Ile Trp Asn Ser Lys Leu
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<212> DNA
<213> Homo sapiens

<220>
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<222> (746)..(1045)

<400> 17094

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gattttccat tgctgtcaca agaacagaaa gcacacatta ggagaaaacc ttacgaatgt 180
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<211> 100
<212> PRT
<213> Homo sapiens

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Asp Tyr Ile Ala Glu Lys Asn Leu Pro Val Phe Gln Pro Gly Val Lys
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Leu Arg Asp Lys Glu Arg Gln Ile Ile Lys Glu Arg Phe Lys Gly Phe
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Asn Asp Gly Leu Glu Glu Leu Cys Lys Ile Gln Lys Ala Trp Ala Ile
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Pro Asp Thr Glu Gln Arg Asp Arg Ile Arg Gln Ala Gln Lys Thr Ile
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<400> 17099

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Phe Ser Ser Met Gly Pro Pro Ala Ser Val Pro Leu Pro Ala Pro Phe
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Phe Lys Gln Thr Thr Thr Pro Ala Thr Ala Pro Thr Thr Thr Ala Pro
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Leu Phe Thr Gly Leu Ala Ser Ala Thr Ser Ala Val Ala Pro Ile Thr
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Ser Ala Ser Pro Ser Thr Asp Ser Ala Ser Lys Pro Ala Phe Gly Phe
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Gly Ile Asn Ser Val Ser Ser Ser Ser Val Ser Thr Thr Thr Ser Thr
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Ala Ala Ser Phe Thr Pro Ala Met Gly Ser Ile Phe Gln Phe Gly Lys
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Pro Pro Ala Leu Pro Thr Thr Thr Thr Val Thr Thr Phe Ser Gln Ser
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Leu Pro Thr Ala Val Pro Thr Ala Thr Ser Ser Ser Ala Ala Asp Phe
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Ser Gly Phe Gly Ser Thr Leu Ala Thr Ser Ala Pro Ala Thr Ser Ser
        195                 200                 205
Gln Pro Thr Leu Thr Phe Ser Asn Thr Ser Thr Pro Thr Phe Asn Ile
    210                 215                 220
Pro Phe Gly Ser Ser Ala Lys Ser Pro Leu Pro Ser Tyr Pro Gly Ala
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Asn Pro Gln Pro Thr Phe Gly Ala Ala Glu Gly Gln Pro Pro Gly Ala
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DOCKET NO. 10945/13211

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<213> Homo sapiens

<400> 17104

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Leu	Gln	Gly	Gln	Pro	Leu	Arg	Asp	Gly	Glu	Glu	Val	Val	Leu	Leu	Leu
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Glu	Gly	Ile	His	Arg	Glu	Pro	Ser	His	Ala	Gly	Pro	Leu	Asp	Phe	Ser
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0020020800 - 05-05-2002

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Glu Ser Ser Arg Asp Gln Glu Leu Ala Ala Val Leu Glu Cys Leu Thr
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Phe Glu Asp Val Pro Glu Asn Lys Ala Trp Pro Ala His Pro Leu Gly
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Lys Gly Ala Ala Trp Pro Thr Pro Ile Leu Ala Glu Ser Gln Ala Asp
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Ser Pro Gly Val Pro Gly Glu Pro Cys Ala Gln Ser Leu Gly Arg Gly
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Pro Leu Thr Asp Val Leu Cys Ser His Cys Gly Gln Ser Phe Gln Arg
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Lys Pro Cys Arg Cys Ser Glu Cys Gly Glu Gly Phe Ser Gln Ser Ala
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His Leu Ala Arg His Gln Arg Ile His Thr Gly Glu Lys Pro His Ala
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Cys Asp Thr Cys Gly His Arg Phe Arg Asn Ser Ser Asn Leu Ala Arg
    610                 615                 620
His Arg Arg Ser His Thr Gly Glu Arg Pro Tyr Ser Cys Gln Thr Cys
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Gly Arg Ser Phe Arg Arg Asn Ala His Leu Arg Arg His Leu Ala Thr
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Leu Val His Thr Gly Ala Arg Pro Tyr Ser Cys Thr Gln Cys Gly Arg
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<213> Homo sapiens

<400> 17106

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Ile Gln Asn Tyr Met Lys Thr Leu Gln Tyr Asn His Thr Gly Thr Gln
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65                  70                  75                  80
Ala Lys Glu Met Thr Arg Glu Ser Leu Pro Ile Lys Cys Leu Glu Ala
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Val Ile Leu Gly Ile Tyr Leu Thr Asn Gly Gln Pro Ser Ile Glu Arg
            100                 105                 110
Phe Pro Ile Ser Phe Lys Thr Tyr Phe Ser Gly Asn Tyr Phe His His
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Val Val Leu Gly Ile Tyr Cys Asn Gly Arg Tyr Gly Ser Leu Gly Met
    130                 135                 140
Ser Arg Arg Ala Glu Leu Met Asp Lys Pro Leu Thr Phe Arg Thr Leu
145                 150                 155                 160
Ser Asp Leu Ile Phe Asp Phe Glu Asp Ser Tyr Lys Lys Tyr Leu His
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Thr Val Lys Lys Val Lys Ile Gly Leu Tyr Val Pro His Glu Pro His
            180                 185                 190
Ser Phe Gln Pro Ile Glu Trp Lys Gln Leu Val Leu Asn Val Ser Lys
        195                 200                 205
Met Leu Arg Ala Asp Ile Arg Lys Glu Leu Glu Lys Tyr Ala Arg Asp
    210                 215                 220
Met Arg Met Lys Ile Leu Lys Pro Ala Ser Ala His Ser Pro Thr Gln
225                 230                 235                 240
Val Arg Ser Arg Gly Lys Ser Leu Ser Pro Arg Arg Arg Gln Ala Ser
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Pro Pro Arg Arg Leu Gly Arg Arg Glu Lys Ser Pro Ala Leu Pro Glu
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<400> 17107

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<222> (16)..(1872)

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Glu Val Met Ala Thr Ser His Val Thr Asp Glu Trp Met Thr Gln Met
50 55 60
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Pro Asn Gly Val Leu Arg Ile Tyr Pro Gly Ser Leu Met Asp Lys Ala
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Gly Leu Ile Ser Leu Thr Gly Pro Tyr Leu Asp Val Gly Gly Ala Gly
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Val Ala His Pro Thr Leu Ile Asp Pro Lys Gly His Ala Pro Val Glu
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Gln Gln His Ile Thr His Lys Glu Pro Leu Val Ala Asn Asp Ile Leu
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Asn His Pro Asn Phe Val Lys Lys Asn Leu Cys Asn Ser Phe Ser Asp
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Arg Thr Val Gln Arg Phe Tyr Lys Phe Asn Thr Ser Leu Ala Gly Asp
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Arg Ile Pro Gly Thr Asn Ala Phe Val Gly Ile Val Asn Glu Thr Cys
        275                 280                 285
Asp Ser Leu Ala Phe Cys Ala Cys Ser Met Val Asp Arg Leu Cys Leu
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Asn Cys His Arg Met Glu Gln Asn Glu Cys Glu Cys Pro Cys Glu Cys
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Ile Asp Pro Gly Leu Gln Asp Ala Leu His Gln Cys Val Asn Ser Arg
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Cys Ser Gln Arg Leu Glu Ser Gly Asp Cys Phe Gly Val Leu Asp Cys
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Glu Trp Cys Met Val Asp Ser Asp Gly Lys Thr His Leu Asp Lys Pro
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Tyr Cys Ala Pro Gln Lys Glu Cys Phe Gly Gly Ile Val Gly Ala Lys
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Ser Pro Tyr Val Asp Asp Met Gly Ala Ile Gly Asp Glu Val Ile Thr
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Leu Asn Met Ile Lys Ser Ala Pro Val Gly Pro Val Ala Gly Gly Ile
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Met Gly Cys Ile Met Val Leu Val Leu Ala Val Tyr Ala Tyr Arg His
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Gln Ile His Arg Arg Ser His Gln His Met Ser Pro Leu Ala Ala Gln
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Glu Met Ser Val Arg Met Ser Asn Leu Glu Asn Asp Arg Asp Glu Arg
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Asp Asp Asp Ser His Glu Asp Arg Gly Ile Ile Ser Asn Thr Arg Phe
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0050360.0050800

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Asp Thr Pro Pro Gln Thr Ala Ala Leu Leu Ser His Lys Phe His His
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<212> PRT
<213> Homo sapiens

<400> 17111

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Leu Leu Glu Asp Asp Ser Gly Met Glu Leu Leu Val Asn Asn Lys Ile
         35                  40                  45
Ile Ser Leu Asp Leu Pro Val Ala Glu Val Tyr Lys Lys Val Trp Cys
     50                  55                  60
Thr Thr Asn Glu Gly Glu Pro Met Arg Ile Val Tyr Arg Met Arg Gly
 65                  70                  75                  80
Leu Leu Gly Asp Ala Thr Glu Glu Phe Ile Glu Ser Leu Asp Ser Thr
                 85                  90                  95
Thr Asp Glu Glu Glu Asp Glu Glu Glu Val Tyr Lys Met Ala Gly Val
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Met Ala Gln Cys Gly Gly Leu Glu Cys Met Leu Asn Arg Leu Ala Gly
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0960-0960-0960-0960

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180 185 190
Ala Glu Gln Val Leu Ser Ile Met Glu Ile Ile Leu Asp Glu Ser Asn
195 200 205
Ala Glu Pro Leu Ser Glu Asp Lys Gly Asn Leu Leu Leu Thr Gly Asp
210 215 220
Lys Asp Gln Leu Val Met Leu Leu Asp Gln Ile Asn Ser Thr Phe Val
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Arg Ser Asn Pro Ser Val Leu Gln Gly Leu Leu Arg Ile Ile Pro Tyr
245 250 255
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260 265 270
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Asp Lys Val Phe Leu Asp Cys Phe Cys Lys Ile Ala Ala Gly Ile Lys
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325 330 335
Lys Asn Leu Asp Ala Asp Ile Trp Lys Lys Phe Leu Ser Arg Pro Ala
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Val Arg Leu Ala Arg Gly Arg Glu Glu Trp Glu Ser Ala Ala Leu Gln
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545 550 555 560
Val Pro Glu Ser Ala Phe Ala Thr Cys Leu Ala Arg His Asn Thr Tyr
565 570 575
Leu Gln Glu Cys Thr Gly Gln Arg Glu Pro Thr Tyr Gln Leu Asn Ile
580 585 590
His Asp Ile Lys Leu Leu Phe Leu Arg Phe Ala Met Glu Gln Ser Phe
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Ser Ala Asp Thr Gly Gly Gly Gly Arg Glu Ser Asn Ile His Leu Ile
610 615 620
Pro Tyr Ile Ile His Thr Val Leu Tyr Val Leu Asn Thr Thr Arg Ala
625 630 635 640
Thr Ser Arg Glu Glu Lys Asn Leu Gln Gly Phe Leu Glu Gln Pro Lys
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Glu Lys Trp Val Glu Ser Ala Phe Glu Val Asp Gly Pro Tyr Tyr Phe
660 665 670
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675 680 685
Arg Val Glu Ile Leu Arg Arg Leu Leu Val Thr Ser Gln Ala Arg Ala
690 695 700
Val Ala Pro Gly Gly Ala Thr Arg Leu Thr Asp Lys Ala Val Lys Asp
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740 745 750
Trp Ser Cys Ser Leu Ala Glu Tyr Ile Arg His Asn Asp Met Pro Ile
755 760 765
Tyr Glu Ala Ala Asp Lys Ala Leu Lys Thr Phe Gln Glu Glu Phe Met
770 775 780
Pro Val Glu Thr Phe Ser Glu Phe Leu Asp Val Ala Gly Leu Leu Ser
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<212> DNA
<213> Homo sapiens

<220>

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<222> (439)..(2340)

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<212> PRT
<213> Homo sapiens

<400> 17113

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         35                  40                  45
Ile Val Asp Gln Thr Asn Val Lys Leu Thr Cys Leu Leu Phe Ser Gly
     50                  55                  60
Asn Tyr Glu Ala Leu Pro Ile Ile Tyr Lys Asn Gly Asp Ile Val Arg
 65                  70                  75                  80
Phe His Arg Leu Lys Ile Gln Val Tyr Lys Lys Glu Thr Gln Gly Ile
                 85                  90                  95
Thr Ser Ser Gly Phe Ala Ser Leu Thr Phe Glu Gly Thr Leu Gly Ala
            100                 105                 110
Pro Ile Ile Pro Arg Thr Ser Ser Lys Tyr Phe Asn Phe Thr Thr Glu
        115                 120                 125
Asp His Lys Met Val Glu Ala Leu Arg Val Trp Ala Ser Thr His Met
    130                 135                 140
Ser Pro Ser Trp Thr Leu Leu Lys Leu Cys Asp Val Gln Pro Met Gln
145                 150                 155                 160
Tyr Phe Asp Leu Thr Cys Gln Leu Leu Gly Lys Ala Glu Val Asp Gly
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Ala Ser Phe Leu Leu Lys Val Trp Asp Gly Thr Arg Thr Pro Phe Pro
            180                 185                 190
Ser Trp Arg Val Leu Ile Gln Asp Leu Val Leu Glu Gly Asp Leu Ser
        195                 200                 205
His Ile His Arg Leu Gln Asn Leu Thr Ile Asp Ile Leu Val Tyr Asp
    210                 215                 220
Asn His Val His Val Ala Arg Ser Leu Lys Val Gly Ser Phe Leu Arg
225                 230                 235                 240
Ile Tyr Ser Leu His Thr Lys Leu Gln Ser Met Asn Ser Glu Asn Gln
                245                 250                 255
Thr Met Leu Ser Leu Glu Phe His Leu His Gly Gly Thr Ser Tyr Gly
            260                 265                 270
Arg Gly Ile Arg Val Leu Pro Glu Ser Asn Ser Asp Val Asp Gln Leu
        275                 280                 285
Lys Lys Asp Leu Glu Ser Ala Asn Leu Thr Ala Asn Gln His Ser Asp
    290                 295                 300
Val Ile Cys Gln Ser Glu Pro Asp Asp Ser Phe Pro Ser Ser Gly Ser
305                 310                 315                 320
Val Ser Leu Tyr Glu Val Glu Arg Cys Gln Gln Leu Ser Ala Thr Ile
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Leu Thr Asp His Gln Tyr Leu Glu Arg Thr Pro Leu Cys Ala Ile Leu
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Tyr Lys Pro Arg Arg Leu Phe Gln Ser Val Lys Leu His Cys Pro Lys
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Cys His Leu Leu Gln Glu Val Pro His Glu Gly Asp Leu Asp Ile Ile
385                 390                 395                 400
Phe Gln Asp Gly Ala Thr Lys Thr Pro Asp Val Lys Leu Gln Asn Thr
                405                 410                 415
Ser Leu Tyr Asp Ser Lys Ile Trp Thr Thr Lys Asn Gln Lys Gly Arg
            420                 425                 430
Lys Val Ala Val His Phe Val Lys Asn Asn Gly Ile Leu Pro Leu Ser
        435                 440                 445
Asn Glu Cys Leu Leu Leu Ile Glu Gly Gly Thr Leu Ser Glu Ile Cys
    450                 455                 460
Lys Leu Ser Asn Lys Phe Asn Ser Val Ile Pro Val Arg Ser Gly His
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Glu Asp Leu Glu Leu Leu Asp Leu Ser Ala Pro Phe Leu Ile Gln Gly
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Thr Ile His His Tyr Gly Cys Lys Gln Cys Ser Ser Leu Arg Ser Ile
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Gln Asn Leu Asn Ser Leu Val Asp Lys Thr Ser Trp Ile Pro Ser Ser
        515                 520                 525
Val Ala Glu Ala Leu Gly Ile Val Pro Leu Gln Tyr Val Phe Val Met
    530                 535                 540
Thr Phe Thr Leu Asp Asp Gly Thr Gly Val Leu Glu Ala Tyr Leu Met
545                 550                 555                 560
Asp Ser Asp Lys Phe Phe Gln Ile Pro Ala Ser Glu Val Leu Met Asp
                565                 570                 575
Asp Asp Leu Gln Lys Ser Val Asp Met Ile Met Asp Met Phe Cys Pro
            580                 585                 590
Pro Gly Ile Lys Ile Asp Ala Tyr Pro Trp Leu Glu Cys Phe Ile Lys
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Ser Tyr Asn Val Thr Asn Gly Thr Asp Asn Gln Ile Cys Tyr Gln Ile
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Phe Asp Thr Thr Val Ala Glu Asp Val Ile
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<210> 17114
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (136)..(1776)

<400> 17114

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<211> 547
<212> PRT
<213> Homo sapiens

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20 25 30
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Gly Asp Gly Met Leu Gly Asp Leu Met Glu Leu Tyr Lys Val Ile Gly
     50                  55                  60
Arg Ser Ala Thr Asp Lys Gln Gln Glu Leu Leu Val Ser Leu Ala Thr
 65                  70                  75                  80
Val Ile Phe Val Ala Ser Gln Lys Ala Leu Ser Val Glu Ser Lys Ala
                 85                  90                  95
Val Ile Lys Gln Gln Leu Glu Ser Val Ser Asn Gly Trp Thr Val Tyr
            100                 105                 110
Arg Ile Ala Arg Gln Ala Ser Arg Met Gly Asn His Asp Met Ala Lys
        115                 120                 125
Glu Leu Tyr Gln Ser Leu Leu Thr Gln Val Ala Ser Glu His Phe Tyr
    130                 135                 140
Phe Trp Leu Asn Ser Leu Lys Glu Phe Ser His Ala Glu Gln Cys Leu
145                 150                 155                 160
Thr Gly Leu Gln Glu Glu Asn Tyr Ser Ser Ala Leu Ser Cys Ile Ala
                165                 170                 175
Glu Ser Leu Lys Phe Tyr His Lys Gly Ile Ala Ser Leu Thr Ala Ala
            180                 185                 190
Ser Thr Pro Leu Asn Pro Leu Ser Phe Gln Cys Glu Phe Val Lys Leu
        195                 200                 205
Arg Ile Asp Leu Leu Gln Ala Phe Ser Gln Leu Ile Cys Thr Cys Asn
    210                 215                 220
Ser Leu Lys Thr Ser Pro Pro Pro Ala Ile Ala Thr Thr Ile Ala Met
225                 230                 235                 240
Thr Leu Gly Asn Asp Leu Gln Arg Cys Gly Arg Ile Ser Asn Gln Met
                245                 250                 255
Lys Gln Ser Met Glu Glu Phe Arg Ser Leu Ala Ser Arg Tyr Gly Asp
            260                 265                 270
Leu Tyr Gln Ala Ser Phe Asp Ala Asp Ser Ala Thr Leu Arg Asn Val
        275                 280                 285
Glu Leu Gln Gln Gln Ser Cys Leu Leu Ile Ser His Ala Ile Glu Ala
    290                 295                 300
Leu Ile Leu Asp Pro Glu Ser Ala Ser Phe Gln Glu Tyr Gly Ser Thr
305                 310                 315                 320
Gly Thr Ala His Ala Asp Ser Glu Tyr Glu Arg Arg Met Met Ser Val
                325                 330                 335
Tyr Asn His Val Leu Glu Glu Val Glu Ser Leu Asn Arg Lys Tyr Thr
            340                 345                 350
Pro Val Ser Tyr Met His Thr Ala Cys Leu Cys Asn Ala Ile Ile Ala
        355                 360                 365
Leu Leu Lys Val Pro Leu Ser Phe Gln Arg Tyr Phe Phe Gln Lys Leu
    370                 375                 380
Gln Ser Thr Ser Ile Thr Leu Ala Leu Ser Pro Ser Pro Arg Asn Pro
385                 390                 395                 400
Ala Glu Pro Ile Ala Val Gln Asn Asn Gln Gln Leu Ala Leu Lys Val
                405                 410                 415
Glu Gly Val Val Gln His Gly Ser Lys Pro Gly Leu Phe Arg Lys Ile
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0005450-0070800

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Gln Asp Tyr Lys Ile Pro Ile Asp Asn Met Thr Asn Glu Met Glu Gln
    450                 455                 460
Arg Val Glu Pro His Asn Asp Tyr Phe Ser Thr Gln Phe Leu Leu Asn
465                 470                 475                 480
Phe Ala Ile Leu Gly Thr His Asn Ile Thr Val Glu Ser Ser Val Lys
                485                 490                 495
Asp Ala Asn Gly Ile Val Trp Lys Thr Gly Pro Arg Thr Thr Ile Phe
            500                 505                 510
Val Lys Ser Leu Glu Asp Pro Tyr Ser Gln Gln Ile Arg Leu Gln Gln
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<213> Homo sapiens

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<210> 17117
<211> 300
<212> PRT
<213> Homo sapiens

<400> 17117

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			20					25				30			
Tyr	Ser	Leu	Thr	Gly	Leu	Cys	Asn	Arg	Ser	Ser	Cys	Pro	Leu	Ala	Asn
		35					40					45			
Ser	Gln	Tyr	Ala	Thr	Ile	Lys	Glu	Glu	Lys	Gly	Gln	Cys	Tyr	Leu	Tyr
	50					55					60				
Met	Lys	Val	Ile	Glu	Arg	Ala	Ala	Phe	Pro	Arg	Arg	Leu	Trp	Glu	Arg
65					70					75					80
Val	Arg	Leu	Ser	Lys	Asn	Tyr	Glu	Lys	Ala	Leu	Glu	Gln	Ile	Asp	Glu
				85					90					95	
Asn	Leu	Ile	Tyr	Trp	Pro	Arg	Phe	Ile	Arg	His	Lys	Cys	Lys	Gln	Arg
			100					105					110		
Phe	Thr	Lys	Ile	Thr	Gln	Tyr	Leu	Ile	Arg	Ile	Arg	Lys	Leu	Thr	Leu
		115					120					125			
Lys	Arg	Gln	Arg	Lys	Leu	Val	Pro	Leu	Ser	Lys	Lys	Val	Glu	Arg	Arg
	130					135					140				
Glu	Lys	Arg	Arg	Glu	Glu	Lys	Ala	Leu	Ile	Ala	Ala	Gln	Leu	Asp	Asn
145					150					155					160
Ala	Ile	Glu	Lys	Glu	Leu	Leu	Glu	Arg	Leu	Lys	Gln	Asp	Thr	Tyr	Gly
				165					170					175	
Asp	Ile	Tyr	Asn	Phe	Pro	Ile	His	Ala	Phe	Asp	Lys	Ala	Leu	Glu	Gln
			180					185					190		
Gln	Glu	Ala	Glu	Ser	Asp	Ser	Leu	Asp	Thr	Glu	Glu	Lys	Asp	Asp	Asp
		195					200					205			

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Asp Asp Asp Glu Glu Asp Val Gly Lys Arg Glu Phe Val Glu Asp Gly
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Glu Val Asp Glu Ser Asp Ile Ser Asp Phe Glu Asp Met Asp Lys Leu
225                 230                 235                 240
Asp Ala Ser Ser Asp Glu Asp Gln Asp Gly Lys Ser Ser Ser Glu Glu
                245                 250                 255
Glu Glu Glu Lys Ala Leu Ser Ala Lys His Lys Gly Lys Met Pro Leu
            260                 265                 270
Arg Gly Pro Leu Gln Arg Lys Arg Ala Tyr Val Glu Ile Glu Tyr Glu
        275                 280                 285
Gln Glu Thr Glu Pro Val Ala Lys Ala Lys Thr Thr
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<210> 17118
<211> 2140
<212> DNA
<213> Homo sapiens

<400> 17118

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<210> 17119
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (9)..(1856)

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<210> 17120
<211> 616
<212> PRT
<213> Homo sapiens

<400> 17120
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35 40 45
Val Leu Val Ala Asp Glu Gln Arg Val Pro Ala His Arg Asn Leu Leu
50 55 60
Ala Val Cys Ser Asp Tyr Phe Asn Ser Met Phe Thr Ile Gly Met Arg
65 70 75 80
Glu Ala Phe Gln Lys Glu Val Glu Leu Ile Gly Ala Ser Tyr Ile Gly
85 90 95
Leu Lys Ala Val Val Asp Phe Leu Tyr Gly Gly Glu Leu Val Leu Asp
100 105 110
Gly Gly Asn Ile Asp Tyr Val Leu Glu Thr Ala His Leu Leu Gln Ile
115 120 125
Trp Thr Val Val Asp Phe Cys Cys Glu Tyr Leu Glu Gln Glu Val Ser
130 135 140
Glu Asp Asn Tyr Leu Tyr Leu Gln Glu Leu Ala Ser Ile Tyr Ser Leu
145 150 155 160
Lys Arg Leu Asp Ala Phe Ile Asp Gly Phe Ile Leu Asn His Phe Gly
165 170 175
Thr Leu Ser Phe Thr Pro Asp Phe Leu Gln Asn Val Ser Met Gln Lys
180 185 190
Leu Cys Val Tyr Leu Ser Ser Ser Glu Val Gln Arg Glu Cys Glu His
195 200 205
Asp Leu Leu Gln Ala Ala Leu Gln Trp Leu Thr Gln Gln Pro Glu Arg
210 215 220
Glu Ala His Ala Arg Gln Val Leu Glu Asn Ile His Phe Pro Leu Ile
225 230 235 240
Pro Lys Asn Asp Leu Leu His Arg Val Lys Pro Ala Val Cys Ser Leu
245 250 255
Leu Pro Lys Glu Ala Asn Cys Glu Gly Phe Ile Glu Glu Ala Val Arg
260 265 270

0060456-0060800

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Tyr His Asn Asn Leu Ala Ala Gln Pro Val Met Gln Thr Lys Arg Thr
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Ala Leu Arg Thr Asn Gln Glu Arg Leu Leu Phe Val Gly Gly Glu Val
    290                 295                 300
Ser Glu Arg Cys Leu Glu Leu Ser Asp Asp Thr Cys Tyr Leu Asp Ala
305                 310                 315                 320
Lys Ser Glu Gln Trp Val Lys Glu Thr Pro Leu Pro Ala Arg Arg Ser
                325                 330                 335
His His Cys Val Ala Val Leu Gly Gly Phe Ile Phe Ile Ala Gly Gly
            340                 345                 350
Ser Phe Ser Arg Asp Asn Gly Gly Asp Ala Ala Ser Asn Leu Leu Tyr
        355                 360                 365
Arg Tyr Asp Pro Arg Cys Lys Gln Trp Ile Lys Val Ala Ser Met Asn
    370                 375                 380
Gln Arg Arg Val Asp Phe Tyr Leu Ala Ser Ile Glu Asp Met Leu Val
385                 390                 395                 400
Ala Ile Gly Gly Arg Asn Glu Asn Gly Ala Leu Ser Ser Val Glu Thr
                405                 410                 415
Tyr Ser Pro Lys Thr Asp Ser Trp Ser Tyr Val Ala Gly Leu Pro Arg
            420                 425                 430
Phe Thr Tyr Gly His Ala Gly Thr Ile Tyr Lys Asp Phe Val Tyr Ile
        435                 440                 445
Ser Gly Gly His Asp Tyr Gln Ile Gly Pro Tyr Arg Lys Asn Leu Leu
    450                 455                 460
Cys Tyr Asp His Arg Thr Asp Val Trp Glu Glu Arg Arg Pro Met Thr
465                 470                 475                 480
Thr Ala Arg Gly Trp His Ser Met Cys Ser Leu Gly Asp Gly Ile Tyr
                485                 490                 495
Ser Ile Gly Gly Ser Asp Asp Asn Ile Glu Ser Met Glu Arg Phe Asp
            500                 505                 510
Val Leu Gly Val Glu Ala Tyr Ser Pro Gln Cys Asn Gln Trp Thr Arg
        515                 520                 525
Val Ala Pro Leu Leu His Ala Asn Ser Glu Ser Gly Val Ala Val Trp
    530                 535                 540
Glu Gly Arg Ile Tyr Ile Leu Gly Gly Tyr Ser Trp Glu Asn Thr Ala
545                 550                 555                 560
Phe Ser Lys Thr Val Gln Val Tyr Asp Arg Glu Ala Asp Lys Trp Ser
                565                 570                 575
Arg Gly Val Asp Leu Pro Lys Ala Ile Ala Gly Gly Ser Ala Cys Val
            580                 585                 590
Cys Ala Leu Glu Pro Arg Pro Glu Asp Lys Lys Lys Lys Gly Lys Gly
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Lys Arg His Gln Asp Arg Gly Gln
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<210> 17121
<211> 2358

0056980.0056980

<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (105)..(1025)

<400> 17121
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gtgtgtgggt gcacatttgt gtgtgtgtgc ctgtgtgtgt gggtgcacat ttgtgtgtgt 180
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09/03/2008 09:50:03

<210> 17122
<211> 307
<212> PRT
<213> Homo sapiens

<400> 17122

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         35                  40                  45
Ala Cys Val Cys Gly Cys Leu Cys Val Trp Gly Thr Phe Val Cys Val
     50                  55                  60
Cys Ala Cys Val Trp Val His Ile Cys Val Cys Ala Ser Val Cys Val
 65                  70                  75                  80
Pro Val Cys Gly Gly Ala His Leu Cys Val Arg Leu Cys Val Gly Val
                 85                  90                  95
His Ile Cys Val Cys Ala Cys Val Cys Gly Cys Thr Phe Val Cys Val
            100                 105                 110
Cys Ala Cys Val Cys Gly Cys Leu Cys Val Cys Gly Ala His Leu Cys
        115                 120                 125
Val Cys Val Cys Leu Cys Val Gly Ala His Leu Cys Val Cys Leu Cys
    130                 135                 140
Val Cys Ala Cys Val Trp Gly Cys Thr Phe Val Cys Val Cys Ala Cys
145                 150                 155                 160
Val Trp Gly Cys Thr Phe Val Cys Val Cys Ala Cys Val Cys Gly Cys
                165                 170                 175
Thr Phe Val Cys Val Cys Ala Cys Val Cys Gly Cys Thr Phe Val Cys
            180                 185                 190
Val Cys Leu Cys Val Trp Val His Ile Cys Val Cys Val Cys Leu Cys
        195                 200                 205
Val Trp Val His Ile Cys Val Cys Ala Cys Val Trp Val His Ile Cys
    210                 215                 220
Val Cys Val Pro Val Cys Val Cys Leu Cys Val Trp Val His Ile Cys
225                 230                 235                 240
Val Cys Val Cys Leu Cys Val Trp Val His Ile Cys Val Cys Val Cys
                245                 250                 255
Ala Cys Val Cys Val Ala Gly Pro Gly Cys Gln Thr Leu Asn Lys Arg
            260                 265                 270
Arg Lys Thr Ser Val Phe Ile Leu Leu Val Gly Arg Trp Ser Arg Asn
        275                 280                 285
Thr Leu Met Glu Ser Ala Leu Gln Glu Arg Cys Leu Cys Leu Trp Arg
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<210> 17123
<211> 1977
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (474)..(1871)

<400> 17123
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<210> 17124

09053469.020800

<211> 466
<212> PRT
<213> Homo sapiens

<400> 17124

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        35                  40                  45
Leu Cys Arg Glu Leu Ser Asp Leu Val Val Tyr Thr Asn Ser Val Ala
    50                  55                  60
Ala Gln Asp Ile Val Asp Asp Gly Thr Thr Gly Asn Val Leu Ser Phe
65                  70                  75                  80
Ser Glu Thr Arg Ala His Gln Val Val Gln Gln Lys Ser Glu Gln Phe
                85                  90                  95
Met Ile Tyr Asn Gln Lys Gln Leu Thr Arg Ile Tyr Pro Ser Ala Tyr
            100                 105                 110
Arg Ile Asp Ser Ser Asn Phe Asn Pro Leu Pro Tyr Trp Asn Ala Gly
        115                 120                 125
Cys Gln Leu Val Ala Leu Asn Tyr Gln Ser Glu Gly Arg Met Met Gln
    130                 135                 140
Leu Asn Arg Ala Lys Phe Lys Ala Asn Gly Asn Cys Gly Tyr Val Leu
145                 150                 155                 160
Lys Pro Gln Gln Met Cys Lys Gly Thr Phe Asn Pro Phe Ser Gly Asp
                165                 170                 175
Pro Leu Pro Ala Asn Pro Lys Lys Gln Leu Ile Leu Lys Val Ile Ser
            180                 185                 190
Gly Gln Gln Leu Pro Lys Pro Pro Asp Ser Met Phe Gly Asp Arg Gly
        195                 200                 205
Glu Ile Ile Asp Pro Phe Val Glu Val Glu Ile Ile Gly Leu Pro Val
    210                 215                 220
Asp Cys Cys Lys Asp Gln Thr Arg Val Val Asp Asp Asn Gly Phe Asn
225                 230                 235                 240
Pro Val Trp Glu Glu Thr Leu Thr Phe Thr Val His Met Pro Glu Ile
                245                 250                 255
Ala Leu Val Arg Phe Leu Val Trp Asp His Asp Pro Ile Gly Arg Asp
            260                 265                 270
Phe Val Gly Gln Arg Thr Val Thr Phe Ser Ser Leu Val Pro Gly Tyr
        275                 280                 285
Arg His Val Tyr Leu Glu Gly Leu Thr Glu Ala Ser Ile Phe Val His
    290                 295                 300
Ile Thr Ile Asn Glu Ile Tyr Gly Lys Asn Arg Gln Leu Gln Gly Leu
305                 310                 315                 320
Lys Gly Leu Phe Asn Lys Asn Pro Arg His Ser Ser Ser Glu Asn Asn
                325                 330                 335
Ser His Tyr Val Arg Lys Arg Ser Ile Gly Asp Arg Ile Leu Arg Arg
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0094260.0002

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            340                 345                 350
Thr Ala Ser Ala Pro Ala Lys Gly Arg Lys Lys Ser Lys Met Gly Phe
        355                 360                 365
Gln Glu Met Val Glu Ile Lys Asp Ser Val Ser Glu Ala Thr Arg Asp
    370                 375                 380
Gln Asp Gly Val Leu Arg Arg Thr Thr Arg Ser Leu Gln Ala Arg Pro
385                 390                 395                 400
Val Ser Met Pro Val Asp Arg Asn Leu Leu Gly Ala Leu Ser Leu Pro
                405                 410                 415
Val Ser Glu Thr Ala Lys Asp Ile Glu Gly Lys Glu Asn Ser Leu Asp
            420                 425                 430
Ser Ser Phe Cys Arg Pro Thr Glu Gln Ala Lys Ala Glu Met Cys Lys
        435                 440                 445
Val Pro Phe Pro Arg Gln Leu Glu Cys Val Met Lys Met Glu Ile Ser
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Glu Thr
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<210> 17125
<211> 2021
<212> DNA
<213> Homo sapiens

<400> 17125

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09525465.032800

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<210> 17126
<211> 2857
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (623)..(1243)

<400> 17126
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0962456 0702800

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<210> 17127
<211> 207
<212> PRT
<213> Homo sapiens

<400> 17127
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His Ile Gln Gly Glu Lys Val Ser Asp Ala Val Glu Thr Tyr Asn Ile
35 40 45
Cys Ser Glu Val Gln Val Val Asn Thr Glu Arg Ser His Leu Val Pro
50 55 60
Gln Thr Pro Gln Lys Pro Leu Ile Ile Pro Arg Pro Thr Ile Phe Lys
65 70 75 80
Pro Asp Val Thr Gln Ser Thr Phe Glu Thr Pro Ser Pro Ser Pro Gly
85 90 95
Phe Gln Ile Pro Gly Ala Glu Gln Glu Tyr Glu His Val Ser Phe His
100 105 110
Lys Ile Ile Ala Gly Ser Val Ala Leu Phe Leu Ser Val Ala Met Ile
115 120 125
Leu Leu Val Ile Tyr Val Ser Trp Lys Arg Tyr Pro Ala Ser Met Lys

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Glu Ser Glu Arg Gln Met Asn Ser Pro Leu Gln Glu Tyr Tyr Val Asp
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Tyr Lys Pro Thr Asn Ser Glu Thr Met Asp Ile Ser Val Asn Gly Ser
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Gly Pro Cys Thr Tyr Thr Ile Ser Gly Ser Arg Glu Cys Glu Val
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<210> 17128
<211> 2488
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (350)..(796)

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aacaagtcgt gagtgtgtac ccatattgag agaattagca ggtgtagagc aagccctggg 180
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cccctctcaa gtggaggcag cagactcggc acacatcgtc gcccatgctg ctgtcgcttc 300
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taaggattct gaagggatgg gaagaaccaa atttctttca attcaagatg aattttgcca 420
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<210> 17129
<211> 149
<212> PRT
<213> Homo sapiens

<400> 17129
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Glu Arg Ala Thr Ser Ile Leu Arg Glu Ser Leu Glu Ala Lys Val Glu
35 40 45
Ala Phe Gly Asp Phe Ser Pro Glu Val Ala Glu Thr Tyr Arg Leu Leu
50 55 60
Gly Gly Ala Asp Leu Ala Gln Gly Asn His Ser Gly Ala Arg Lys Lys
65 70 75 80
Leu Lys Lys Cys Leu Gln Ile Gln Thr Leu Leu Tyr Gly Pro Gln Asp
85 90 95
Lys Arg Thr Leu Ala Thr Gln Gln Ala Met Gly Met Leu Ser Thr Ala
100 105 110
Pro Lys Val Ala Ser Lys Pro Arg Gln Ala Ser Lys Ala Lys Val Ala
115 120 125
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130 135 140
Gly Thr Thr Ala Asp
145

<210> 17130
<211> 2378
<212> DNA

09605360-050804

<213> Homo sapiens

<220>
<221> CDS
<222> (474)..(2180)

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caaacctcag taaacatctg agaattcaca caaaagagaa accttgtgat aacaatggct 420
gtgggagatc ttacaagtca cccctcatag gacaccagaa aacagatgca gagatggaac 480
tctgtggtgg cagtgaatat gggaagacat cacatctcaa aggacatcag agaattctca 540
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aaactttctc tcacaagaca cacctcagtg tacatcagag agttcacaca ggggagaaac 720
cctatgaatg taatgactgt gggaaatctt ttacctataa ctcagccctg agagcacatc 780
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ataattcagc cctcagagca catcatagaa ttcacacggg ggagaaacct tatgaatgta 900
atgaatgtgg aaggtctttt gcccatattt ctgttctcaa ggcacatcaa agaattcaca 960
caggggagaa accctatgaa tgtaatgaat gtgggagatc tttcacctac aattcagccc 1020
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<210> 17131
<211> 569
<212> PRT
<213> Homo sapiens

<400> 17131

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Cys Gly Lys Thr Phe Ser Lys Thr Ser His Leu Arg Ala His Gln Arg
         35                  40                  45
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Val Glu Cys Glu Lys Thr
     50                  55                  60
Phe Ser His Lys Thr His Leu Ser Val His Gln Arg Val His Thr Gly
 65                  70                  75                  80
Glu Lys Pro Tyr Glu Cys Asn Asp Cys Gly Lys Ser Phe Thr Tyr Asn
                 85                  90                  95
Ser Ala Leu Arg Ala His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
            100                 105                 110
Glu Cys Ser Asp Cys Glu Lys Thr Phe Ala His Asn Ser Ala Leu Arg
        115                 120                 125
Ala His His Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu
    130                 135                 140
Cys Gly Arg Ser Phe Ala His Ile Ser Val Leu Lys Ala His Gln Arg
145                 150                 155                 160
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Arg Ser
                165                 170                 175
Phe Thr Tyr Asn Ser Ala Leu Arg Ala His Gln Arg Ile His Thr Gly
            180                 185                 190
Arg Lys Pro Tyr Glu Cys Ser Asp Cys Glu Lys Thr Phe Ala His Asn
        195                 200                 205
Ser Ala Leu Lys Ile His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
    210                 215                 220
Glu Cys Asn Glu Cys Glu Lys Thr Phe Ala His Asn Ser Ala Leu Arg
225                 230                 235                 240
Ala His Gln Asn Ile His Thr Gly Glu Lys Leu Tyr Glu Cys Ser Glu
                245                 250                 255
Cys Gly Lys Thr Phe Phe Gln Lys Thr Arg Leu Ser Thr His Arg Arg
            260                 265                 270
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Ser Lys Cys Gly Lys Thr
        275                 280                 285
Phe Ser Gln Lys Ser Tyr Leu Ser Gly His Glu Arg Ile His Thr Gly
    290                 295                 300
Glu Lys Pro Tyr Glu Cys Asn Val Cys Gly Lys Thr Phe Val Tyr Lys
305                 310                 315                 320
Ala Ala Leu Ile Val His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
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                325                 330                 335
Glu Cys Asn Gln Cys Gly Lys Thr Phe Ser Gln Arg Thr His Leu Cys
            340                 345                 350
Ala His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu
        355                 360                 365
Cys Gly Lys Thr Phe Ala Asp Asn Ser Ala Leu Arg Ala His His Arg
    370                 375                 380
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Asp Cys Gly Lys Thr
385                 390                 395                 400
Phe Ser Lys Thr Ser His Leu Arg Ala His Leu Arg Thr Arg Ser Gly
                405                 410                 415
Glu Lys Pro Tyr Glu Cys Ser Glu Cys Gly Lys Thr Phe Ser Glu Lys
            420                 425                 430
Ser Tyr Val Ser Ala His Gln Arg Val His Thr Gly Glu Lys Pro Tyr
        435                 440                 445
Glu Cys Asn Val Cys Gly Lys Pro Phe Ala His Asn Ser Thr Leu Arg
    450                 455                 460
Val His Gln Arg Ile His Thr Gly Glu Lys Ser Tyr Glu Cys Asn Asp
465                 470                 475                 480
Cys Gly Lys Thr Phe Ser Gln Lys Ser His Leu Ser Ala His Gln Arg
                485                 490                 495
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala
            500                 505                 510
Phe Ala Gln Asn Ser Thr Leu Arg Val His Gln Arg Ile His Thr Gly
        515                 520                 525
Glu Lys Pro Tyr Glu Cys Asp Glu Cys Gly Lys Thr Phe Val Arg Lys
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Ala Ala Leu Arg Val His His Thr Arg Met His Thr Arg Glu Lys Thr
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<211> 2753
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (9)..(1571)

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gcatcatgta cggtgttttc ttgtgcattg actgttccgg ggtgcaccgc tccctgggcg 180
tccatctgag cttcatcagg tccacagagt tggattccaa ctggaactgg ttccagctga 240
ggtgtatgca ggtcggcggg aatgccaatg cgacggcttt ttttcgccaa catggatgca 300

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<210> 17133
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<212> PRT
<213> Homo sapiens

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0056470.0056470

<400> 17133

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Asn Pro Ser Trp Ala Ser Ile Met Tyr Gly Val Phe Leu Cys Ile Asp
         35                  40                  45
Cys Ser Gly Val His Arg Ser Leu Gly Val His Leu Ser Phe Ile Arg
     50                  55                  60
Ser Thr Glu Leu Asp Ser Asn Trp Asn Trp Phe Gln Leu Arg Cys Met
 65                  70                  75                  80
Gln Val Gly Gly Asn Ala Asn Ala Thr Ala Phe Phe Arg Gln His Gly
                 85                  90                  95
Cys Thr Ala Asn Asp Ala Asn Thr Lys Tyr Ser Ser Arg Ala Ala Gln
            100                 105                 110
Met Tyr Arg Glu Lys Ile Arg Gln Leu Gly Ser Ala Ala Leu Ala Arg
        115                 120                 125
His Gly Thr Asp Leu Trp Ile Asp Asn Met Ser Ser Ala Val Pro Asn
    130                 135                 140
His Ser Pro Glu Lys Lys Asp Ser Asp Phe Phe Thr Glu His Thr Gln
145                 150                 155                 160
Pro Pro Ala Trp Asp Ala Pro Ala Thr Glu Pro Ser Gly Thr Gln Gln
                165                 170                 175
Pro Ala Pro Ser Thr Glu Ser Ser Gly Leu Ala Gln Pro Glu His Gly
            180                 185                 190
Pro Asn Thr Asp Leu Leu Gly Thr Ser Pro Lys Ala Ser Leu Glu Leu
        195                 200                 205
Lys Ser Ser Ile Ile Gly Lys Lys Lys Pro Ala Ala Ala Lys Lys Gly
    210                 215                 220
Leu Gly Ala Lys Lys Gly Leu Gly Ala Gln Lys Val Ser Ser Gln Ser
225                 230                 235                 240
Phe Ser Glu Ile Glu Arg Gln Ala Gln Val Ala Glu Lys Leu Arg Glu
                245                 250                 255
Gln Gln Ala Ala Asp Ala Lys Lys Gln Ala Glu Glu Ser Met Val Ala
            260                 265                 270
Ser Met Arg Leu Ala Tyr Gln Glu Leu Gln Ile Asp Arg Lys Lys Glu
        275                 280                 285
Glu Lys Lys Leu Gln Asn Leu Glu Gly Lys Lys Arg Glu Gln Ala Glu
    290                 295                 300
Arg Leu Gly Met Gly Leu Val Ser Arg Ser Ser Val Ser His Ser Val
305                 310                 315                 320
Leu Ser Glu Met Gln Val Ile Glu Gln Glu Thr Pro Val Ser Ala Lys
                325                 330                 335
Ser Ser Arg Ser Gln Leu Asp Leu Phe Asp Asp Val Gly Thr Phe Ala
            340                 345                 350
Ser Gly Pro Pro Lys Tyr Lys Asp Asn Pro Phe Ser Leu Gly Glu Ser
        355                 360                 365
Phe Gly Ser Arg Trp Asp Thr Asp Ala Ala Trp Gly Met Asp Arg Val
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Glu Glu Lys Glu Pro Glu Val Thr Ile Ser Ser Ile Arg Pro Ile Ser
385                 390                 395                 400
Glu Arg Ala Thr Asn Arg Arg Glu Val Glu Ser Arg Ser Ser Gly Leu
                405                 410                 415
Glu Ser Ser Glu Ala Arg Gln Lys Phe Ala Gly Ala Lys Ala Ile Ser
            420                 425                 430
Ser Asp Met Phe Phe Gly Arg Glu Val Asp Ala Glu Tyr Glu Ala Arg
        435                 440                 445
Ser Arg Leu Gln Gln Leu Ser Gly Ser Ser Ala Ile Ser Ser Ser Asp
    450                 455                 460
Leu Phe Gly Asp Met Asp Gly Ala His Gly Ala Gly Ser Val Ser Leu
465                 470                 475                 480
Gly Asn Val Leu Pro Thr Ala Asp Ile Ala Gln Phe Lys Gln Gly Val
                485                 490                 495
Lys Ser Val Ala Gly Lys Met Ala Val Leu Ala Asn Gly Val Met Asn
            500                 505                 510
Ser Leu Gln Asp Arg Tyr Gly Ser Tyr
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (154)..(1908)

<400> 17134

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Trp Ser Arg Ser Gly Pro Gly Arg Gly Gly Gly Ala Gly Ser Ser Arg
65 70 75 80
Val Pro Arg Gly Val Pro Gly Pro Ala Val Cys Ala Pro Gly Ser Leu
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Leu Phe Asp Asn Pro Arg Thr Phe Ser Arg Arg Pro Pro Ala Gln Ala
115 120 125

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180 185 190
Gln Glu Glu Arg Gln Cys Ile Lys Thr Ser Ser Leu Phe Lys Asn Asn
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<212> DNA
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Ile Pro Pro Leu Pro Ser Lys Leu Pro Pro Val Asn Leu Ile His Arg
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100 105 110
Gln Lys Leu Asp Ala Tyr Lys Arg Leu Cys Ala Phe Ala Tyr Pro Asn
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<210> 17141
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<212> DNA
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<220>
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<212> PRT
<213> Homo sapiens

<400> 17142
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35 40 45
Leu Phe Ser Ala Asp Gln Ala Ala Leu Ala Ala Cys Gly Thr Glu Asn
50 55 60
Ser Gly Arg Leu Gln Asp Leu Gly Met Glu Leu Leu Ala Lys Ser Ser

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Pro Lys Pro Ala Arg Ser Ser Val Ala Gly Ser Leu Ser Leu Arg Arg
            100                 105                 110
Ala Val Asp Pro Gly Glu Asn Ser Arg Ser Lys Gly Asp Cys Gln Thr
        115                 120                 125
Leu Ser Glu Gly Ser Pro Gly Ser Ser Gln Ser Gly Ser Arg His Ser
    130                 135                 140
Ser Pro Arg Ala Leu Ile His Gly Ser Ile Gly Asp Ile Leu Pro Lys
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Thr Glu Asp Arg Gln Cys Lys Ala Leu Asp Ser Asp Ala Val Val Val
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Ala Val Phe Ser Gly Leu Pro Ala Val Glu Lys Arg Arg Lys Met Val
            180                 185                 190
Thr Leu Gly Ala Asn Ala Lys Gly Gly His Leu Glu Gly Leu Gln Met
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Thr Asp Leu Glu Asn Asn Ser Glu Thr Gly Glu Leu Gln Pro Val Leu
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Pro Glu Gly Ala Ser Ala Ala Pro Glu Glu Gly Met Ser Ser Asp Ser
225                 230                 235                 240
Asp Ile Glu Cys Asp Thr Glu Asn Glu Glu Gln Glu Glu His Thr Ser
                245                 250                 255
Val Gly Gly Phe His Asp Ser Phe Met Val Met Thr Gln Pro Pro Asp
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<212> DNA
<213> Homo sapiens

<220>
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<400> 17143

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<211> 190
<212> PRT
<213> Homo sapiens

<400> 17144
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20 25 30
Leu Leu Gly Lys Leu Arg Leu Glu Cys Ala Asp Leu Leu Glu Thr Arg
35 40 45
Gly Val Val Leu Arg Asp Pro Thr Leu Phe Ser Phe Leu Trp Val Val
50 55 60
Asp Phe Pro Leu Phe Leu Pro Lys Glu Glu Asn Pro Arg Glu Leu Glu
65 70 75 80

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Ser Ala His His Pro Phe Thr Ala Pro His Pro Ser Asp Ile His Leu
85 90 95
Leu Tyr Thr Glu Pro Lys Lys Glu Asp Val Lys Met Leu Ser His Leu
100 105 110
Leu Gln Ala Leu Asp Tyr Gly Ala Pro Pro His Gly Gly Ile Ala Leu
115 120 125
Gly Leu Asp Arg Leu Ile Cys Leu Val Thr Gly Ser Pro Ser Ile Arg
130 135 140
Asp Val Ile Ala Phe Pro Lys Ser Phe Arg Gly His Asp Leu Met Ser
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<211> 2314
<212> DNA
<213> Homo sapiens

<220>
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<222> (60)..(2159)

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<210> 17146
<211> 700
<212> PRT
<213> Homo sapiens

<400> 17146
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Leu Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala
35 40 45
Asp Leu Ala Phe Ala Val Arg Ala Leu Cys Cys Lys Arg Ala Leu Arg
50 55 60
Ala Arg Ala Leu Ala Ala Ala Ala Ala Asp Pro Glu Gly Pro Glu Gly
65 70 75 80
Gly Cys Ser Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala
85 90 95
Ala His Thr Phe Leu Ile His Gly Ser Arg Arg Phe Ser Tyr Ser Glu
100 105 110
Ala Glu Arg Glu Ser Asn Arg Ala Ala Arg Ala Phe Leu Arg Ala Leu
115 120 125
Gly Trp Asp Trp Gly Pro Asp Gly Gly Asp Ser Gly Glu Gly Ser Ala
130 135 140
Gly Glu Gly Glu Arg Ala Ala Pro Gly Ala Gly Asp Ala Ala Ala Gly
145 150 155 160
Ser Gly Ala Glu Phe Ala Gly Gly Asp Gly Ala Ala Arg Gly Gly Gly
165 170 175
Ala Ala Ala Pro Leu Ser Pro Gly Ala Thr Val Ala Leu Leu Leu Pro

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His Cys Leu Arg Ser Cys Gly Ala Arg Ala Leu Val Leu Ala Pro Glu
225                 230                 235                 240
Phe Leu Glu Ser Leu Glu Pro Asp Leu Pro Ala Leu Arg Ala Met Gly
                245                 250                 255
Leu His Leu Trp Ala Ala Gly Pro Gly Thr His Pro Ala Gly Ile Ser
            260                 265                 270
Asp Leu Leu Ala Glu Val Ser Ala Glu Val Asp Gly Pro Val Pro Gly
        275                 280                 285
Tyr Leu Ser Ser Pro Gln Ser Ile Thr Asp Thr Cys Leu Tyr Ile Phe
    290                 295                 300
Thr Ser Gly Thr Thr Gly Leu Pro Lys Ala Ala Arg Ile Ser His Leu
305                 310                 315                 320
Lys Ile Leu Gln Cys Gln Gly Phe Tyr Gln Leu Cys Gly Val His Gln
                325                 330                 335
Glu Asp Val Ile Tyr Leu Ala Leu Pro Leu Tyr His Met Ser Gly Ser
            340                 345                 350
Leu Leu Gly Ile Val Gly Cys Met Gly Ile Gly Ala Thr Val Val Leu
        355                 360                 365
Lys Ser Lys Phe Ser Ala Gly Gln Phe Trp Glu Asp Cys Gln Gln His
    370                 375                 380
Arg Val Thr Val Phe Gln Tyr Ile Gly Glu Leu Cys Arg Tyr Leu Val
385                 390                 395                 400
Asn Gln Pro Pro Ser Lys Ala Glu Arg Gly His Lys Val Arg Leu Ala
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Val Gly Ser Gly Leu Arg Pro Asp Thr Trp Glu Arg Phe Val Arg Arg
            420                 425                 430
Phe Gly Pro Leu Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu Gly Asn
        435                 440                 445
Val Ala Thr Ile Asn Tyr Thr Gly Gln Arg Gly Ala Val Gly Arg Ala
    450                 455                 460
Ser Trp Leu Tyr Lys His Ile Phe Pro Phe Ser Leu Ile Arg Tyr Asp
465                 470                 475                 480
Val Thr Thr Gly Glu Pro Ile Arg Asp Pro Gln Gly His Cys Met Ala
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Thr Ser Pro Gly Glu Pro Gly Leu Leu Val Ala Pro Val Ser Gln Gln
            500                 505                 510
Ser Pro Phe Leu Gly Tyr Ala Gly Gly Pro Glu Leu Ala Gln Gly Lys
        515                 520                 525
Leu Leu Lys Asp Val Phe Arg Pro Gly Asp Val Phe Phe Asn Thr Gly
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Asp Leu Leu Val Cys Asp Asp Gln Gly Phe Leu Arg Phe His Asp Arg
545                 550                 555                 560
Thr Gly Asp Thr Phe Arg Trp Lys Gly Glu Asn Val Ala Thr Thr Glu
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                565                 570                 575
Val Ala Glu Val Phe Glu Ala Leu Asp Phe Leu Gln Glu Val Asn Val
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Tyr Gly Val Thr Val Pro Gly His Glu Gly Arg Ala Gly Met Ala Ala
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Leu Val Leu Arg Pro Pro His Ala Leu Asp Leu Met Gln Leu Tyr Thr
    610                 615                 620
His Val Ser Glu Asn Leu Pro Pro Tyr Ala Arg Pro Arg Phe Leu Arg
625                 630                 635                 640
Leu Gln Glu Ser Leu Ala Thr Thr Glu Thr Phe Lys Gln Gln Lys Val
                645                 650                 655
Arg Met Ala Asn Glu Gly Phe Asp Pro Ser Thr Leu Ser Asp Pro Leu
            660                 665                 670
Tyr Val Leu Asp Gln Ala Val Gly Ala Tyr Leu Pro Leu Thr Thr Ala
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Arg Tyr Ser Ala Leu Leu Ala Gly Asn Leu Arg Ile
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<210> 17147
<211> 2544
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (128)..(1162)

<400> 17147

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<210> 17148
<211> 345
<212> PRT
<213> Homo sapiens

<400> 17148

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Gln Ala Leu Leu Gln Tyr Gly Asp Pro Val Asn Ala Gln Gln Ala Lys
         35                  40                  45
Leu Ala Leu Asp Gly Gln Asn Ile Tyr Asn Ala Cys Cys Thr Leu Arg
     50                  55                  60
Ile Asp Phe Ser Lys Leu Val Asn Leu Asn Val Lys Tyr Asn Asn Asp
 65                  70                  75                  80
Lys Ser Arg Asp Tyr Thr Arg Pro Asp Leu Pro Ser Gly Asp Gly Gln
                 85                  90                  95
Pro Ala Leu Asp Pro Ala Ile Ala Ala Ala Phe Ala Lys Glu Thr Ser
            100                 105                 110
Leu Leu Ala Val Pro Gly Ala Leu Ser Pro Leu Ala Ile Pro Asn Ala
        115                 120                 125
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Ala Ala Ala Ala Ala Ala Ala Ala Ala Gly Arg Val Gly Met Pro Gly
    130                 135                 140
Val Ser Ala Gly Gly Asn Thr Val Leu Leu Val Ser Asn Leu Asn Glu
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Glu Met Val Thr Pro Gln Ser Leu Phe Thr Leu Phe Gly Val Tyr Gly
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Asp Val Gln Arg Val Lys Ile Leu Tyr Asn Lys Lys Asp Ser Ala Leu
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Ile Gln Met Ala Asp Gly Asn Gln Ser Gln Leu Ala Met Asn His Leu
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Asn Gly Gln Lys Met Tyr Gly Lys Ile Ile Arg Val Thr Leu Ser Lys
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His Gln Thr Val Gln Leu Pro Arg Glu Gly Leu Asp Asp Gln Gly Leu
225                 230                 235                 240
Thr Lys Asp Phe Gly Asn Ser Pro Leu His Arg Phe Lys Lys Pro Gly
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Ser Lys Asn Phe Gln Ser Ile Phe Pro Pro Ser Ala Thr Leu His Leu
            260                 265                 270
Ser Asn Ile Pro Pro Ser Val Ala Glu Glu Asp Leu Arg Thr Leu Phe
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Ala Asn Thr Gly Gly Thr Val Lys Ala Phe Lys Phe Phe Gln Arg Asp
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His Lys Met Ala Leu Leu Gln Met Ala Thr Val Glu Glu Ala Ile Gln
305                 310                 315                 320
Ala Leu Ile Asp Leu His Asn Tyr Asn Leu Gly Glu Asn His His Leu
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0050450-0050800

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (113)..(2572)

<400> 17149

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<211> 820
<212> PRT
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Ile Trp Thr Glu Gln Ala Asn Glu Lys Met Asn Ala Lys Leu Glu Glu

0502946-0072800

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Thr Leu Glu Asp Gln Glu Leu Lys Glu Asn Val Glu Ile Ile Cys Asn
 65                  70                  75                  80
Leu Gln Gln Leu Ile Thr Gln Leu Ser Asp Glu Thr Val Ala Cys Met
                 85                  90                  95
Ala Ala Ala Ile Asp Thr Ala Val Glu Gln Glu Ala Gln Val Glu Thr
            100                 105                 110
Ser Pro Glu Thr Ser Arg Ser Ser Asp Ala Phe Thr Thr Gln His Ala
        115                 120                 125
Leu Arg Gln Ala Gln Met Ser Lys Glu Leu Val Glu Leu Asn Lys Ala
    130                 135                 140
Leu Ala Leu Lys Glu Ala Leu Ala Arg Lys Met Thr Gln Asn Asp Ser
145                 150                 155                 160
Gln Leu Gln Pro Ile Gln Tyr Gln Tyr Gln Asp Asn Ile Lys Glu Leu
                165                 170                 175
Glu Leu Glu Val Ile Asn Leu Gln Lys Glu Lys Glu Glu Leu Val Leu
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Glu Leu Gln Thr Ala Lys Lys Asp Ala Asn Gln Ala Lys Leu Ser Glu
        195                 200                 205
Arg Arg Arg Lys Arg Leu Gln Glu Leu Glu Gly Gln Ile Ala Asp Leu
    210                 215                 220
Lys Lys Lys Leu Asn Glu Gln Ser Lys Leu Leu Lys Leu Lys Glu Ser
225                 230                 235                 240
Thr Glu Arg Thr Val Ser Lys Leu Asn Gln Glu Ile Arg Met Met Lys
                245                 250                 255
Asn Gln Arg Val Gln Leu Met Arg Gln Met Lys Glu Asp Ala Glu Lys
            260                 265                 270
Phe Arg Gln Trp Lys Gln Lys Lys Asp Lys Glu Val Ile Gln Leu Lys
        275                 280                 285
Glu Arg Asp Arg Lys Arg Gln Tyr Glu Leu Leu Lys Leu Glu Arg Asn
    290                 295                 300
Phe Gln Lys Gln Ser Asn Val Leu Arg Arg Lys Thr Glu Glu Ala Ala
305                 310                 315                 320
Ala Ala Asn Lys Arg Leu Lys Asp Ala Leu Gln Lys Gln Arg Glu Val
                325                 330                 335
Ala Asp Lys Arg Lys Glu Thr Gln Ser Arg Gly Met Glu Gly Thr Ala
            340                 345                 350
Ala Arg Val Lys Asn Trp Leu Gly Asn Glu Ile Glu Val Met Val Ser
        355                 360                 365
Thr Glu Glu Ala Lys Arg His Leu Asn Asp Leu Leu Glu Asp Arg Lys
    370                 375                 380
Ile Leu Ala Gln Asp Val Ala Gln Leu Lys Glu Lys Lys Glu Ser Gly
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Arg Trp Glu Asn Ile Ala Thr Ile Leu Glu Ala Lys Cys Ala Leu Lys
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Glu Ser Ser Leu Lys Gln Ser Lys Thr Ser Cys Ala Asp Met Gln Lys
            500                 505                 510
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Gln Ala Glu Leu Val Arg Met Glu Gln Gln His Gln Glu Lys Val Leu
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Tyr Leu Leu Ser Gln Leu Gln Gln Ser Gln Met Ala Glu Lys Gln Leu
545                 550                 555                 560
Glu Glu Ser Val Ser Glu Lys Glu Gln Gln Leu Leu Ser Thr Leu Lys
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Cys Gln Asp Glu Glu Leu Glu Lys Met Arg Glu Val Cys Glu Gln Asn
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Gln Gln Leu Leu Arg Glu Asn Glu Ile Ile Lys Gln Lys Leu Thr Leu
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Leu Gln Val Ala Ser Arg Gln Lys His Leu Pro Lys Asp Thr Leu Leu
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Ser Pro Asp Ser Ser Phe Glu Tyr Val Pro Pro Lys Pro Lys Pro Ser
625                 630                 635                 640
Arg Val Lys Glu Lys Phe Leu Glu Gln Ser Met Asp Ile Glu Asp Leu
                645                 650                 655
Lys Tyr Cys Ser Glu His Ser Val Asn Glu His Glu Asp Gly Asp Gly
            660                 665                 670
Asp Asp Asp Glu Gly Asp Asp Glu Glu Trp Lys Pro Thr Lys Leu Val
        675                 680                 685
Lys Val Ser Arg Lys Asn Ile Gln Gly Cys Ser Cys Lys Gly Trp Cys
    690                 695                 700
Gly Asn Lys Gln Cys Gly Cys Arg Lys Gln Lys Ser Asp Cys Gly Val
705                 710                 715                 720
Asp Cys Cys Cys Asp Pro Thr Lys Cys Arg Asn Arg Gln Gln Gly Lys
                725                 730                 735
Asp Ser Leu Gly Thr Val Glu Arg Thr Gln Asp Ser Glu Gly Ser Phe
            740                 745                 750
Lys Leu Glu Asp Pro Thr Glu Val Thr Pro Gly Leu Ser Phe Phe Asn
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Pro Val Cys Ala Thr Pro Asn Ser Lys Ile Leu Lys Glu Met Cys Asp
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35 40 45
Arg Lys Glu Ala Tyr Val His Lys Ser Val Met Glu Glu Leu Lys Arg
50 55 60
Ile Ile Asp Asp Ser Glu Ile Thr Lys Glu Asp Asp Ala Leu Trp Pro
65 70 75 80
Pro Pro Asp Arg Val Gly Arg Gln Glu Leu Glu Ile Val Ile Gly Asp
85 90 95
Glu His Ile Ser Phe Thr Thr Ser Lys Ile Gly Ser Leu Ile Asp Val
100 105 110
Asn Gln Ser Lys Asp Pro Glu Gly Leu Arg Val Phe Tyr Tyr Leu Val
115 120 125
Gln Asp Leu Lys Cys Leu Val Phe Ser Leu Ile Gly Leu His Phe Lys
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Ile Lys Pro Ile
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<212> DNA
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<220>
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<222> (85)..(2181)

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<212> PRT
<213> Homo sapiens

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35 40 45
Thr Ser Asn Glu Phe Pro Asp Asp Thr Leu Asn Phe Ile Lys Thr His
50 55 60
Pro Leu Met Asp Glu Ala Val Pro Ser Ile Phe Asn Arg Pro Trp Phe
65 70 75 80
Leu Arg Thr Met Val Arg Tyr Arg Leu Thr Lys Ile Ala Val Asp Thr
85 90 95
Ala Ala Gly Pro Tyr Gln Asn His Thr Val Val Phe Leu Gly Ser Glu
100 105 110
Lys Gly Ile Ile Leu Lys Phe Leu Ala Arg Ile Gly Asn Ser Gly Phe
115 120 125
Leu Asn Asp Ser Leu Phe Leu Glu Glu Met Ser Val Tyr Asn Ser Glu
130 135 140
Lys Cys Ser Tyr Asp Gly Val Glu Asp Lys Arg Ile Met Gly Met Gln
145 150 155 160
Leu Asp Arg Ala Ser Ser Ser Leu Tyr Val Ala Phe Ser Thr Cys Val
165 170 175
Ile Lys Val Pro Leu Gly Arg Cys Glu Arg His Gly Lys Cys Lys Lys
180 185 190
Thr Cys Ile Ala Ser Arg Asp Pro Tyr Cys Gly Trp Ile Lys Glu Gly
195 200 205
Gly Ala Cys Ser His Leu Ser Pro Asn Ser Arg Leu Thr Phe Glu Gln
210 215 220
Asp Ile Glu Arg Gly Asn Thr Asp Gly Leu Gly Asp Cys His Asn Ser
225 230 235 240
Phe Val Ala Leu Asn Gly His Ser Ser Ser Leu Leu Pro Ser Thr Thr
245 250 255
Thr Ser Asp Ser Thr Ala Gln Glu Gly Tyr Glu Ser Arg Gly Gly Met
260 265 270
Leu Asp Trp Lys His Leu Leu Asp Ser Pro Asp Ser Thr Asp Pro Leu

0050340-0050800

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Glu Ser Tyr Leu Lys Gly His Asp Gln Leu Val Pro Val Thr Leu Leu
305                 310                 315                 320
Ala Ile Ala Val Ile Leu Ala Phe Val Met Gly Ala Val Phe Ser Gly
                325                 330                 335
Ile Thr Val Tyr Cys Val Cys Asp His Arg Arg Lys Asp Val Ala Val
            340                 345                 350
Val Gln Arg Lys Glu Lys Glu Leu Thr His Ser Arg Arg Gly Ser Met
        355                 360                 365
Ser Ser Val Thr Lys Leu Ser Gly Leu Phe Gly Asp Thr Gln Ser Lys
    370                 375                 380
Asp Pro Lys Pro Glu Ala Ile Leu Thr Pro Leu Met His Asn Gly Lys
385                 390                 395                 400
Leu Ala Thr Pro Gly Asn Thr Ala Lys Met Leu Ile Lys Ala Asp Gln
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His His Leu Asp Leu Thr Ala Leu Pro Thr Pro Glu Ser Thr Pro Thr
            420                 425                 430
Leu Gln Gln Lys Arg Lys Pro Ser Arg Gly Ser Arg Glu Trp Glu Arg
        435                 440                 445
Asn Gln Asn Leu Ile Asn Ala Cys Thr Lys Asp Met Pro Pro Met Gly
    450                 455                 460
Ser Pro Val Ile Pro Thr Asp Leu Pro Leu Arg Ala Ser Pro Ser His
465                 470                 475                 480
Ile Pro Ser Val Val Val Leu Pro Ile Thr Gln Gln Gly Tyr Gln His
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Glu Tyr Val Asp Gln Pro Lys Met Ser Glu Val Ala Gln Met Ala Leu
            500                 505                 510
Glu Asp Gln Ala Ala Thr Leu Glu Tyr Lys Thr Ile Lys Glu His Leu
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Ser Ser Lys Ser Pro Asn His Gly Val Asn Leu Val Glu Asn Leu Asp
    530                 535                 540
Ser Leu Pro Pro Lys Val Pro Gln Arg Glu Ala Ser Leu Gly Pro Pro
545                 550                 555                 560
Gly Ala Ser Leu Ser Gln Thr Gly Leu Ser Lys Arg Leu Glu Met His
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His Ser Ser Ser Tyr Gly Val Asp Tyr Lys Arg Ser Tyr Pro Thr Asn
            580                 585                 590
Ser Leu Thr Arg Ser His Gln Ala Thr Thr Leu Lys Arg Asn Asn Thr
        595                 600                 605
Asn Ser Ser Asn Ser Ser His Leu Ser Arg Asn Gln Ser Phe Gly Arg
    610                 615                 620
Gly Asp Asn Pro Pro Pro Ala Pro Gln Arg Val Asp Ser Ile Gln Val
625                 630                 635                 640
His Ser Ser Gln Pro Ser Gly Gln Ala Val Thr Val Ser Arg Gln Pro
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Ser Leu Asn Ala Tyr Asn Ser Leu Thr Arg Ser Gly Leu Lys Arg Thr
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (115)..(1146)

<400> 17155
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0699250.0002800

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<211> 344
<212> PRT
<213> Homo sapiens

<400> 17156
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35 40 45
Gln Glu Lys Tyr Ser Asn Leu Val Gln Ser Val Leu Ser Ser Arg Gly
50 55 60
Val Ala Gln Thr Pro Gly Ser Val Glu Glu Asp Ala Leu Leu Cys Gly
65 70 75 80
Pro Val Ser Lys His Lys Leu Pro Asn Gln Gly Glu Asp Arg Arg Val
85 90 95
Pro Gln Asn Trp Phe Pro Ile Phe Asn Pro Glu Arg Ser Asp Lys Pro
100 105 110
Asn Ala Ser Asp Pro Ser Val Pro Leu Lys Ile Pro Leu Gln Arg Asn
115 120 125
Val Ile Pro Ser Val Thr Arg Val Leu Gln Gln Thr Met Thr Lys Gln
130 135 140
Gln Val Phe Leu Leu Glu Arg Trp Lys Gln Arg Met Ile Leu Glu Leu
145 150 155 160
Gly Glu Asp Gly Phe Lys Glu Tyr Thr Ser Asn Val Phe Leu Gln Gly
165 170 175
Lys Arg Phe His Glu Ala Leu Glu Ser Ile Leu Ser Pro Gln Glu Thr
180 185 190
Leu Lys Glu Arg Asp Glu Asn Leu Leu Lys Ser Gly Tyr Ile Glu Ser
195 200 205
Val Gln His Ile Leu Lys Asp Val Ser Gly Val Arg Ala Leu Glu Ser
210 215 220
Ala Val Gln His Glu Thr Leu Asn Tyr Ile Gly Leu Leu Asp Cys Val
225 230 235 240
Ala Glu Tyr Gln Gly Lys Leu Cys Val Ile Asp Trp Lys Thr Ser Glu
245 250 255
Lys Pro Lys Pro Phe Ile Gln Ser Thr Phe Asp Asn Pro Leu Gln Val
260 265 270
Val Ala Tyr Met Gly Ala Met Asn His Asp Thr Asn Tyr Ser Phe Gln

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Val Gln Cys Gly Leu Ile Val Val Ala Tyr Lys Asp Gly Ser Pro Ala
    290                 295                 300
His Pro His Leu Met Asp Ala Glu Leu Cys Ser Gln Tyr Trp Thr Lys
305                 310                 315                 320
Trp Leu Leu Arg Leu Glu Glu Tyr Thr Glu Lys Lys Lys Asn Gln Asn
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Ile Gln Lys Pro Glu Tyr Ser Glu
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<210> 17157
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<212> DNA
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<220>
<221> CDS
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<400> 17157

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<211> 613
<212> PRT
<213> Homo sapiens

<400> 17158
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35 40 45
Val Gly Pro Glu Gly Asp Met Pro Cys Arg Ala Asn Ile Leu Val Thr
50 55 60
Glu Leu Phe Asp Thr Glu Leu Ile Gly Glu Gly Ala Leu Pro Ser Tyr
65 70 75 80
Glu His Ala His Arg His Leu Val Glu Glu Asn Cys Glu Ala Val Pro
85 90 95
His Arg Ala Thr Val Tyr Ala Gln Leu Val Glu Ser Gly Arg Met Trp
100 105 110
Ser Trp Asn Lys Leu Phe Pro Ile His Val Gln Thr Ser Leu Gly Glu
115 120 125
Gln Val Ile Val Pro Pro Val Asp Val Glu Ser Cys Pro Gly Ala Pro
130 135 140
Ser Val Cys Asp Ile Gln Leu Asn Gln Val Ser Pro Ala Asp Phe Thr
145 150 155 160
Val Leu Ser Asp Val Leu Pro Met Phe Ser Ile Asp Phe Ser Lys Gln
165 170 175
Val Ser Ser Ser Ala Ala Cys His Ser Arg Arg Phe Glu Pro Leu Thr
180 185 190
Ser Gly Arg Ala Gln Val Val Leu Ser Trp Trp Asp Ile Glu Met Asp
195 200 205
Pro Glu Gly Lys Ile Lys Cys Thr Met Ala Pro Phe Trp Ala His Ser
210 215 220
Asp Pro Glu Glu Met Gln Trp Arg Asp His Trp Met Gln Cys Val Tyr
225 230 235 240
Phe Leu Pro Gln Glu Glu Pro Val Val Gln Gly Ser Ala Leu Tyr Leu
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305                 310                 315                 320
Lys Pro Asp Ser Val Cys Leu Cys Val Ser Asp Gly Ser Leu Leu Ser
                325                 330                 335
Val Leu Ala His His Leu Gly Val Glu Gln Val Phe Thr Val Glu Ser
            340                 345                 350
Ser Ala Ala Ser His Lys Leu Leu Arg Lys Ile Phe Lys Ala Asn His
        355                 360                 365
Leu Glu Asp Lys Ile Asn Ile Ile Glu Lys Arg Pro Glu Leu Leu Thr
    370                 375                 380
Asn Glu Asp Leu Gln Gly Arg Lys Val Ser Leu Leu Leu Gly Glu Pro
385                 390                 395                 400
Phe Phe Thr Thr Ser Leu Leu Pro Trp His Asn Leu Tyr Phe Trp Tyr
                405                 410                 415
Val Arg Thr Ala Val Asp Gln His Leu Gly Pro Gly Ala Met Val Met
            420                 425                 430
Pro Gln Ala Ala Ser Leu His Ala Val Val Val Glu Phe Arg Asp Leu
        435                 440                 445
Trp Arg Ile Arg Ser Pro Cys Gly Asp Cys Glu Gly Phe Asp Val His
    450                 455                 460
Ile Met Asp Asp Met Ile Lys Arg Ala Leu Asp Phe Arg Glu Ser Arg
465                 470                 475                 480
Glu Ala Glu Pro His Pro Leu Trp Glu Tyr Pro Cys Arg Ser Leu Ser
                485                 490                 495
Glu Pro Trp Gln Ile Leu Thr Phe Asp Phe Gln Gln Pro Val Pro Leu
            500                 505                 510
Gln Pro Leu Cys Ala Glu Gly Thr Val Glu Leu Arg Arg Pro Gly Gln
        515                 520                 525
Ser His Ala Ala Val Leu Trp Met Glu Tyr His Leu Thr Pro Glu Cys
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Thr Leu Ser Thr Gly Leu Leu Glu Pro Ser Asp Pro Glu Gly Gly Cys
545                 550                 555                 560
Cys Trp Asn Pro His Cys Lys Gln Ala Val Tyr Phe Phe Ser Pro Ala
                565                 570                 575
Pro Asp Pro Arg Ala Leu Leu Gly Gly Pro Arg Thr Val Ser Tyr Ala
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<210> 17159
<211> 2000
<212> DNA

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

<220>
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<222> (90)..(1958)

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<212> PRT

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<213> Homo sapiens

<400> 17161

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Leu Lys Gly Phe Ala Gly Leu Asp Lys Ala Val Pro Ser Leu His Ser
    50                  55                  60
Leu Cys Gln Phe Arg Val Ala Thr Gln Gly Gly Ile Met Ile Thr Ile
65                  70                  75                  80
Lys Glu Ala Ile Ser Asp Glu Asp Glu Asp Glu Ala Leu Tyr Gln Lys
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Val Ser Ser Glu Gln Gly Arg Val Glu His Leu Gly Asp Leu Leu Ser
            100                 105                 110
His Cys Gln Glu Cys Gly Leu Ala Gly Asp Phe Phe Ile Phe Cys Leu
        115                 120                 125
Lys Glu Leu Thr His Val Ala Ser Glu Asn Glu Thr Glu Leu Lys Thr
    130                 135                 140
Glu Pro Phe Ser Ser Lys Ser Leu Leu Glu Leu Glu Gln His Gln Thr
145                 150                 155                 160
Leu Leu Val Glu Gly Gln Glu Arg Lys Leu Leu Val Leu Gln Leu Met
                165                 170                 175
Ala Val Leu Cys Glu Arg Met Ser Glu Gln Ile Phe Thr Asn Val Thr
            180                 185                 190
Gln Val Val Asp Phe Val Ala Ala Thr Leu Gln Arg Ala Cys Ala Ser
        195                 200                 205
Leu Ala His Gln Ala Glu Ser Thr Val Glu Ser Gln Thr Leu Ser Met
    210                 215                 220
Ser Met Gly Leu Val Ala Val Met Leu Gly Gly Ala Val Gln Leu Lys
225                 230                 235                 240
Ser Ser Asp Phe Ala Val Leu Lys Gln Leu Leu Pro Leu Leu Glu Lys
                245                 250                 255
Val Ser Asn Thr Tyr Pro Asp Pro Val Ile Gln Glu Leu Ala Val Asp
            260                 265                 270
Leu Arg Ile Thr Ile Ser Thr His Gly Ala Phe Ala Thr Glu Ala Val
        275                 280                 285
Ser Met Ala Ala Gln Ser Thr Leu Asn Arg Lys Asp Leu Glu Gly Lys
    290                 295                 300
Ile Glu Glu Gln Gln Gln Thr Ser His Glu Arg Pro Thr Asp Val Ala
305                 310                 315                 320
His Ser His Leu Glu Gln Gln Gln Ser His Glu Thr Ala Pro Gln Thr
                325                 330                 335
Gly Leu Gln Ser Asn Ala Pro Ile Ile Pro Gln Gly Val Asn Glu Pro
            340                 345                 350
Ser Thr Thr Thr Ser Gln Lys Ser Gly Ser Val Thr Thr Glu Gln Leu
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        355                 360                 365
Gln Glu Val Leu Leu Ser Ala Tyr Asp Pro Gln Ile Pro Thr Arg Ala
    370                 375                 380
Ala Ala Leu Arg Thr Leu Ser His Trp Ile Glu Gln Arg Glu Ala Lys
385                 390                 395                 400
Ala Leu Glu Met Gln Glu Lys Leu Leu Lys Ile Phe Leu Glu Asn Leu
                405                 410                 415
Glu His Glu Asp Thr Phe Val Tyr Leu Ser Ala Ile Gln Gly Val Ala
            420                 425                 430
Leu Leu Ser Asp Val Tyr Pro Glu Lys Ile Leu Pro Asp Leu Leu Ala
        435                 440                 445
Gln Tyr Asp Ser Ser Lys Asp Lys His Thr Pro Glu Thr Arg Met Lys
    450                 455                 460
Val Gly Glu Val Leu Met Arg Ile Val Arg Ala Leu Gly Asp Met Val
465                 470                 475                 480
Ser Lys Tyr Arg Glu Pro Leu Ile His Thr Phe Leu Arg Gly Val Arg
                485                 490                 495
Asp Pro Asp Gly Ala His Arg Ala Ser Ser Leu Ala Asn Leu Gly Glu
            500                 505                 510
Leu Cys Gln Arg Leu Asp Phe Leu Leu Gly Ser Val Val His Glu Val
        515                 520                 525
Thr Ala Cys Leu Ile Ala Val Ala Lys Thr Asp Gly Glu Val Gln Val
    530                 535                 540
Arg Arg Ala Ala Ile His Val Val Val Leu Leu Leu Arg Gly Leu Ser
545                 550                 555                 560
Gln Lys Ala Thr Glu Val Leu Ser Ala Val Leu Lys Asp Leu Tyr His
                565                 570                 575
Leu Leu Lys His Val Val Cys Leu Glu Pro Asp Asp Val Ala Lys Leu
            580                 585                 590
His Ala Gln Leu Ala Leu Glu Glu Leu Asp Asp Ile Met Lys Asn Phe
        595                 600                 605
Leu Phe Pro Pro Gln Lys Leu Glu Lys Lys Ile Met Val Leu Pro
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<210> 17162
<211> 2963
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (10)..(1725)

<400> 17162
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agcactggac gagagtttgc agccttttt gccaagaaga aacctcaaag gccaaaaaat 120
tctcttttca agttcgaatc gtcctcccat gccatcagta tgagcgccta tctgcgagaa 180

0.0.0.

cagagaaggg agctctatag tcggagtgga gaactgcaag ggggtcctga tgacaactta 240
attgaaggtg gaggaacaaa atttgtctgc aaacctggag ccagaaacat taccgtcata 300
ttccacccat tactaagatt tattcaggag attgagcatg ctctgggtct tggcccagcc 360
aaacagtgtc ctcttcgaga gtttctcacc gtgtacatca aaaacatctt tctcaatcaa 420
gtcttggctg agatcaacaa ggagattgaa ggagtcacta aaacatctga ccctttgaag 480
attctggcca acgcagacac catgaaggtg ctgggagtgc agcggcctct cctacagagc 540
acaatcattg tggagaagac agttcaagac ctcctgaacc tgatgcatga cttgagtgca 600
tattcagatc aattcctcaa catggtgtgc gtgaagctcc aggagtacaa ggacacctgc 660
actgcagctt acaggggtat tgtccagtca gaagaaaaac ttgtcatcag tgcatcctgg 720
gcaaaagatg atgatatcag cagactcttg aaatctctac caaactggat gaatatggct 780
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gccattgtgg ctaatgtgga aagtatggat tatgaccccc tggtggtcaa gctcaacaaa 1260
gatatcagcg ccattgaaga ggccatgagc gccagccttc agcagcacaa gttccagtat 1320
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aggcgcatca gtgagtctgg catcaagaaa atgtgtagga acatttttgt tcttcagcag 1440
aatttgacca acatcaccat gtcgcgggag gcagacctgg actttgcaag gcagtactac 1500
gagatgcttt acaacacagc tgacgagctc ctgaacctgg tggtggacca gggtgtgaag 1560
tacacggagc tggagtacat ccacgctctg accctgctgc accgcagcca aactggggtg 1620
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gctgccatca agcaagccac caaggacaag aagataacta ccgtttagca gggcgtactg 1740
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tatttctgct atataaaaac caagagccag acaattagac aactatggag gaatgaaagg 2460
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ccatggttca taggtcatag aaggcagcaa tgcactgact gggccacatc ttgaaaactc 2820
gtggaaaggg aaaggggagg agatgggact ttgaccacac acagtgatgc ctcacaccct 2880
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ttaaaaagtg ttttgagaag ctt 2963

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<210> 17163
<211> 572
<212> PRT
<213> Homo sapiens

<400> 17163

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Met Lys Asn Thr Arg Thr Ala Ser Glu Pro Ser Ala Gln Leu Ser Tyr
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Ala Ser Thr Gly Arg Glu Phe Ala Ala Phe Phe Ala Lys Lys Lys Pro
             20                  25                  30
Gln Arg Pro Lys Asn Ser Leu Phe Lys Phe Glu Ser Ser Ser His Ala
         35                  40                  45
Ile Ser Met Ser Ala Tyr Leu Arg Glu Gln Arg Arg Glu Leu Tyr Ser
     50                  55                  60
Arg Ser Gly Glu Leu Gln Gly Gly Pro Asp Asp Asn Leu Ile Glu Gly
 65                  70                  75                  80
Gly Gly Thr Lys Phe Val Cys Lys Pro Gly Ala Arg Asn Ile Thr Val
                 85                  90                  95
Ile Phe His Pro Leu Leu Arg Phe Ile Gln Glu Ile Glu His Ala Leu
            100                 105                 110
Gly Leu Gly Pro Ala Lys Gln Cys Pro Leu Arg Glu Phe Leu Thr Val
        115                 120                 125
Tyr Ile Lys Asn Ile Phe Leu Asn Gln Val Leu Ala Glu Ile Asn Lys
    130                 135                 140
Glu Ile Glu Gly Val Thr Lys Thr Ser Asp Pro Leu Lys Ile Leu Ala
145                 150                 155                 160
Asn Ala Asp Thr Met Lys Val Leu Gly Val Gln Arg Pro Leu Leu Gln
                165                 170                 175
Ser Thr Ile Ile Val Glu Lys Thr Val Gln Asp Leu Leu Asn Leu Met
            180                 185                 190
His Asp Leu Ser Ala Tyr Ser Asp Gln Phe Leu Asn Met Val Cys Val
        195                 200                 205
Lys Leu Gln Glu Tyr Lys Asp Thr Cys Thr Ala Ala Tyr Arg Gly Ile
    210                 215                 220
Val Gln Ser Glu Glu Lys Leu Val Ile Ser Ala Ser Trp Ala Lys Asp
225                 230                 235                 240
Asp Asp Ile Ser Arg Leu Leu Lys Ser Leu Pro Asn Trp Met Asn Met
                245                 250                 255
Ala Gln Pro Lys Gln Leu Arg Pro Lys Arg Glu Glu Glu Glu Asp Phe
            260                 265                 270
Ile Arg Ala Ala Phe Gly Lys Glu Ser Glu Val Leu Ile Gly Asn Leu
        275                 280                 285
Gly Asp Lys Leu Ile Pro Pro Gln Asp Ile Leu Arg Asp Val Ser Asp
    290                 295                 300
Leu Lys Ala Leu Ala Asn Met His Glu Ser Leu Glu Trp Leu Ala Ser
305                 310                 315                 320
Arg Thr Lys Ser Ala Phe Ser Asn Leu Ser Thr Ser Gln Met Leu Ser
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                325                 330                 335
Pro Ala Gln Asp Ser His Thr Asn Thr Asp Leu Pro Pro Val Ser Glu
            340                 345                 350
Gln Ile Met Gln Thr Leu Ser Glu Leu Ala Lys Ser Phe Gln Asp Met
        355                 360                 365
Ala Asp Arg Cys Leu Leu Val Leu His Leu Glu Val Arg Val His Cys
    370                 375                 380
Phe His Tyr Leu Ile Pro Leu Ala Lys Glu Gly Asn Tyr Ala Ile Val
385                 390                 395                 400
Ala Asn Val Glu Ser Met Asp Tyr Asp Pro Leu Val Val Lys Leu Asn
                405                 410                 415
Lys Asp Ile Ser Ala Ile Glu Glu Ala Met Ser Ala Ser Leu Gln Gln
            420                 425                 430
His Lys Phe Gln Tyr Ile Phe Glu Gly Leu Gly His Leu Ile Ser Cys
        435                 440                 445
Ile Leu Ile Asn Gly Ala Gln Tyr Phe Arg Arg Ile Ser Glu Ser Gly
    450                 455                 460
Ile Lys Lys Met Cys Arg Asn Ile Phe Val Leu Gln Gln Asn Leu Thr
465                 470                 475                 480
Asn Ile Thr Met Ser Arg Glu Ala Asp Leu Asp Phe Ala Arg Gln Tyr
                485                 490                 495
Tyr Glu Met Leu Tyr Asn Thr Ala Asp Glu Leu Leu Asn Leu Val Val
            500                 505                 510
Asp Gln Gly Val Lys Tyr Thr Glu Leu Glu Tyr Ile His Ala Leu Thr
        515                 520                 525
Leu Leu His Arg Ser Gln Thr Gly Val Gly Glu Leu Thr Thr Gln Asn
    530                 535                 540
Thr Arg Leu Gln Arg Leu Lys Glu Ile Ile Cys Glu Gln Ala Ala Ile
545                 550                 555                 560
Lys Gln Ala Thr Lys Asp Lys Lys Ile Thr Thr Val
                565                 570
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<210> 17164
<211> 2168
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (62)..(1732)

<400> 17164
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gctgctgttc ttctgggtaa ccaagaggaa gttggaggtg ccgacgggac ctgaagtgca 180
gacccctaag gtttggtcct tgtttttcaa ggtggctggg atgagccctt gggcgcctca 240
ggtgcctgta tcacccactc ctccctacca aagagggcat cttcctacag gaggacacct 300

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ctttcttcaa gtcagatgca cactgctggt gtattgcacg gaccttccac ccactagcat 420
catcatcacc ttccacaacg aggcccgctc cacgctgctc aggaccatcc gcagtgtatt 480
aaaccgcacc cctacgcatc tgatccggga aatcatatta gtggatgact tcagcaatga 540
ccctgatgac tgtaaacagc tcatcaaatt gcccaaggtg aaatgcttgc gcaataatga 600
acggcaaggt ctggtccggt cccggattcg gggcgctgac atcgcccagg gcaccactct 660
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ccagtgggag cagctctccc cagagcagaa ggctcggcgc ctggacccca cggagcccat 900
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agtgtggatg tgcgggggca gcctagagat cgtcccctgc agccgagtgg ggcacgtctt 1080
ccggaagaag cacccctacg ttttccctga tggaaatgcc aacacgtata taaagaacac 1140
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caacccatgt gagtcctcac tcatgagcca gcactgggac atggtgagct cttgaggacc 1740
cctgccagaa gcagcaaggg ccatggggtg gtgcttccct ggaccagaac agactggaaa 1800
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ccccccagga caggagcaac tgtctcaggg aggacagagg aaaacatcac aagccaatgg 1920
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tccctgattg gtatctggag acagaaacct aatgggaagt gtttattgtt ccttttccta 2040
caaaggaagc agtctctgga ggccagaaag aaaagccttc tttttcacta ggccaggact 2100
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gtctctgg 2168

<210> 17165
<211> 557
<212> PRT
<213> Homo sapiens

<400> 17165
Met Arg Arg Leu Thr Arg Arg Leu Val Leu Pro Val Phe Gly Val Leu
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Trp Ile Thr Val Leu Leu Phe Phe Trp Val Thr Lys Arg Lys Leu Glu
20 25 30
Val Pro Thr Gly Pro Glu Val Gln Thr Pro Lys Val Trp Ser Leu Phe
35 40 45
Phe Lys Val Ala Gly Met Ser Pro Trp Ala Pro Gln Val Pro Val Ser
50 55 60

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Pro Thr Pro Pro Tyr Gln Arg Gly His Leu Pro Thr Gly Gly His Leu
 65                  70                  75                  80
Ala Val Cys His Phe Pro Cys Leu Leu Gln Glu Ala Gln Phe His Leu
                 85                  90                  95
Gln Thr Gln Val Phe Leu Gln Val Arg Cys Thr Leu Leu Val Tyr Cys
            100                 105                 110
Thr Asp Leu Pro Pro Thr Ser Ile Ile Ile Thr Phe His Asn Glu Ala
        115                 120                 125
Arg Ser Thr Leu Leu Arg Thr Ile Arg Ser Val Leu Asn Arg Thr Pro
    130                 135                 140
Thr His Leu Ile Arg Glu Ile Ile Leu Val Asp Asp Phe Ser Asn Asp
145                 150                 155                 160
Pro Asp Asp Cys Lys Gln Leu Ile Lys Leu Pro Lys Val Lys Cys Leu
                165                 170                 175
Arg Asn Asn Glu Arg Gln Gly Leu Val Arg Ser Arg Ile Arg Gly Ala
            180                 185                 190
Asp Ile Ala Gln Gly Thr Thr Leu Thr Phe Leu Asp Ser His Cys Glu
        195                 200                 205
Val Asn Arg Asp Trp Leu Gln Pro Leu Leu His Arg Val Lys Glu Asp
    210                 215                 220
Tyr Thr Arg Val Val Cys Pro Val Ile Asp Ile Ile Asn Leu Asp Thr
225                 230                 235                 240
Phe Thr Tyr Ile Glu Ser Ala Ser Glu Leu Arg Gly Gly Phe Asp Trp
                245                 250                 255
Ser Leu His Phe Gln Trp Glu Gln Leu Ser Pro Glu Gln Lys Ala Arg
            260                 265                 270
Arg Leu Asp Pro Thr Glu Pro Ile Arg Thr Pro Ile Ile Ala Gly Gly
        275                 280                 285
Leu Phe Val Ile Asp Lys Ala Trp Phe Asp Tyr Leu Gly Lys Tyr Asp
    290                 295                 300
Met Asp Met Asp Ile Trp Gly Gly Glu Asn Phe Glu Ile Ser Phe Arg
305                 310                 315                 320
Val Trp Met Cys Gly Gly Ser Leu Glu Ile Val Pro Cys Ser Arg Val
                325                 330                 335
Gly His Val Phe Arg Lys Lys His Pro Tyr Val Phe Pro Asp Gly Asn
            340                 345                 350
Ala Asn Thr Tyr Ile Lys Asn Thr Lys Arg Thr Ala Glu Val Trp Met
        355                 360                 365
Asp Glu Tyr Lys Gln Tyr Tyr Tyr Ala Ala Arg Pro Phe Ala Leu Glu
    370                 375                 380
Arg Pro Phe Gly Asn Val Glu Ser Arg Leu Asp Leu Arg Lys Asn Leu
385                 390                 395                 400
Arg Cys Gln Ser Phe Lys Trp Tyr Leu Glu Asn Ile Tyr Pro Glu Leu
                405                 410                 415
Ser Ile Pro Lys Glu Ser Ser Ile Gln Lys Gly Asn Ile Arg Gln Arg
            420                 425                 430
Gln Lys Cys Leu Glu Ser Gln Arg Gln Asn Asn Gln Glu Thr Pro Asn
        435                 440                 445
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Leu Lys Leu Ser Pro Cys Ala Lys Val Lys Gly Glu Asp Ala Lys Ser
    450                 455                 460
Gln Val Trp Ala Phe Thr Tyr Thr Gln Gln Ile Leu Gln Glu Glu Leu
465                 470                 475                 480
Cys Leu Ser Val Ile Thr Leu Phe Pro Gly Ala Pro Val Val Leu Val
                485                 490                 495
Leu Cys Lys Asn Gly Asp Asp Arg Gln Gln Trp Thr Lys Thr Gly Ser
            500                 505                 510
His Ile Glu His Ile Ala Ser His Leu Cys Leu Asp Thr Asp Met Phe
        515                 520                 525
Gly Asp Gly Thr Glu Asn Gly Lys Glu Ile Val Val Asn Pro Cys Glu
    530                 535                 540
Ser Ser Leu Met Ser Gln His Trp Asp Met Val Ser Ser
545                 550                 555
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<210> 17166
<211> 2057
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (2)..(1564)

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ctaccagcac gccttcctct acatccgcca gctcgccata cacctgcgca acgccatgac 480
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cccggtgctg cctttcatcc tggagatgtt ccagcaggtc gacttcaaca ggaagccagg 780
gcgcatgagc tccaagccca tcaacttctc cgtgatcctg aagctgtcca atgtcaacct 840
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<210> 17167
<211> 521
<212> PRT
<213> Homo sapiens

<400> 17167

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			20					25					30		
Glu	Thr	Thr	Val	Leu	Ala	Ala	Val	Leu	Arg	His	Ile	Ser	Val	Leu	Val
		35					40					45			
Pro	Cys	Phe	Leu	Thr	Phe	Pro	Lys	Gln	Cys	Arg	Met	Leu	Leu	Lys	Arg
	50					55					60				
Met	Val	Val	Val	Trp	Ser	Thr	Gly	Glu	Glu	Ser	Leu	Arg	Val	Leu	Ala
65					70					75					80
Phe	Leu	Val	Leu	Ser	Arg	Val	Cys	Arg	His	Lys	Lys	Asp	Thr	Phe	Leu
				85					90					95	
Gly	Pro	Val	Leu	Lys	Gln	Met	Tyr	Ile	Thr	Tyr	Val	Arg	Asn	Cys	Lys
			100					105					110		
Phe	Thr	Ser	Pro	Gly	Ala	Leu	Pro	Phe	Ile	Ser	Phe	Met	Gln	Trp	Thr
		115					120					125			
Leu	Thr	Glu	Leu	Leu	Ala	Leu	Glu	Pro	Gly	Val	Ala	Tyr	Gln	His	Ala
	130					135					140				
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Thr	Arg	Lys	Lys	Glu	Thr	Tyr	Gln	Ser	Val	Tyr	Asn	Trp	Gln	Tyr	Val
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His	Cys	Leu	Phe	Leu	Trp	Cys	Arg	Val	Leu	Ser	Thr	Ala	Gly	Pro	Ser
			180					185					190		
Glu	Ala	Leu	Gln	Pro	Leu	Val	Tyr	Pro	Leu	Ala	Gln	Val	Ile	Ile	Gly
		195					200					205			
Cys	Ile	Lys	Leu	Ile	Pro	Thr	Ala	Arg	Phe	Tyr	Pro	Leu	Arg	Met	His

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Arg Lys Pro Gly Arg Met Ser Ser Lys Pro Ile Asn Phe Ser Val Ile
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Leu Val Glu Gln Leu Tyr Asp Leu Thr Leu Glu Tyr Leu His Ser Gln
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Tyr Tyr Ser His Trp Arg Lys Leu Arg Asp Arg Glu Ile Gln Leu Glu
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Arg Arg Lys Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys
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Asp Leu Phe Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe
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Ser Glu Arg Gly Ile Leu Arg Pro Leu Ser Thr Arg His Gly Val Glu
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Asp Asp Glu Glu Asp Glu Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser
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<213> Homo sapiens

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<222> (68)..(3658)

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<210> 17169
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<212> PRT
<213> Homo sapiens

<400> 17169

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Ala Gly Ser Ala Ser Trp Gly Ala Val Ser Ser Leu Asn Asp Val Ser
         35                  40                  45
Asn His Thr Leu Ser Leu Gly Pro Val Pro Gly Ala Val Val Tyr Ser
     50                  55                  60
Ser Ser Ser Val Pro Asp Lys Ser Lys Pro Ser Pro Gln Lys Asp Gln
 65                  70                  75                  80
Ala Leu Gly Asp Gly Ile Ala Pro Pro Gln Lys Val Leu Phe Pro Ser
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Glu Lys Ile Cys Leu Lys Trp Gln Gln Thr His Arg Val Gly Ala Gly
            100                 105                 110
Leu Gln Asn Leu Gly Asn Thr Cys Phe Ala Asn Ala Ala Leu Gln Cys
        115                 120                 125
Leu Thr Tyr Thr Pro Pro Leu Ala Asn Tyr Met Leu Ser His Glu His
    130                 135                 140
Ser Lys Thr Cys His Ala Glu Gly Phe Cys Met Met Cys Thr Met Gln
145                 150                 155                 160
Ala His Ile Thr Gln Ala Leu Ser Asn Pro Gly Asp Val Ile Lys Pro
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225 230 235 240
Arg Val Lys Cys Leu Asn Cys Lys Gly Val Ser Asp Thr Phe Asp Pro
245 250 255
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260 265 270
Ala Leu Glu Gln Phe Val Lys Pro Glu Gln Leu Asp Gly Glu Asn Ser
275 280 285
Tyr Lys Cys Ser Lys Cys Lys Lys Met Val Pro Ala Ser Lys Arg Phe
290 295 300
Thr Ile His Arg Ser Ser Asn Val Leu Thr Leu Ser Leu Lys Arg Phe
305 310 315 320
Ala Asn Phe Thr Gly Gly Lys Ile Ala Lys Asp Val Lys Tyr Pro Glu
325 330 335
Tyr Leu Asp Ile Arg Pro Tyr Met Ser Gln Pro Asn Gly Glu Pro Ile
340 345 350
Val Tyr Val Leu Tyr Ala Val Leu Val His Thr Gly Phe Asn Cys His
355 360 365
Ala Gly His Tyr Phe Cys Tyr Ile Lys Ala Ser Asn Gly Leu Trp Tyr
370 375 380
Gln Met Asn Asp Ser Ile Val Ser Thr Ser Asp Ile Arg Ser Val Leu
385 390 395 400
Ser Gln Gln Ala Tyr Val Leu Phe Tyr Ile Arg Ser His Asp Val Lys
405 410 415
Asn Gly Gly Glu Leu Thr His Pro Thr His Ser Pro Gly Gln Ser Ser
420 425 430
Pro Arg Pro Val Ile Ser Gln Arg Val Val Thr Asn Lys Gln Ala Ala
435 440 445
Pro Gly Phe Ile Gly Pro Gln Leu Pro Ser His Met Ile Lys Asn Pro
450 455 460
Pro His Leu Asn Gly Thr Gly Pro Leu Lys Asp Thr Pro Ser Ser Ser
465 470 475 480
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485 490 495
Asn Ala Ser Ala Ser Val Gln Asn Trp Ser Val Asn Arg Ser Ser Val
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Ile Pro Glu His Pro Lys Lys Gln Lys Ile Thr Ile Ser Ile His Asn
515 520 525
Lys Leu Pro Val Arg Gln Cys Gln Ser Gln Pro Asn Leu His Ser Asn
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Ser Leu Glu Asn Pro Thr Lys Pro Val Pro Ser Ser Thr Ile Thr Asn
545 550 555 560
Ser Ala Val Gln Ser Thr Ser Asn Ala Ser Thr Met Ser Val Ser Ser
565 570 575

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Lys Val Thr Lys Pro Ile Pro Arg Ser Glu Ser Cys Ser Gln Pro Val
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Met Asn Gly Lys Ser Lys Leu Asn Ser Ser Val Leu Val Pro Tyr Gly
595 600 605
Ala Glu Ser Ser Glu Asp Ser Asp Glu Glu Ser Lys Gly Leu Gly Lys
610 615 620
Glu Asn Gly Ile Gly Thr Ile Val Ser Ser His Ser Pro Gly Gln Asp
625 630 635 640
Ala Glu Asp Glu Glu Ala Thr Pro His Glu Leu Gln Glu Pro Thr Thr
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Arg Leu Ser Asn Lys Leu Lys Gly Ser Thr Asp Glu Met Ser Ala Pro
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Gly Ala Glu Arg Gly Pro Pro Glu Asp Arg Asp Ala Glu Pro Gln Pro
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755 760 765
Leu Ser Ser Thr Lys Lys Ala Pro Pro Pro Arg Asp Pro Gly Thr Pro
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785 790 795 800
Pro Pro Pro Ser Ala Gly Glu Asp Ile Val Gly Asp Thr Ala Pro Pro
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885 890 895
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Glu Gly Asp Ala Glu Pro Ser Pro Gly Glu Arg Val Glu Asp Ala Ala
915 920 925
Ala Pro Lys Ala Pro Gly Pro Ser Pro Ala Lys Glu Lys Ile Gly Ser
930 935 940
Leu Arg Lys Val Asp Arg Gly His Tyr Arg Ser Arg Arg Glu Arg Ser
945 950 955 960

0050950.0050800

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Arg His Ala Pro Glu His His Pro Gly His Gly Asp Arg Leu Ser Pro
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Gly Glu Arg Arg Ser Leu Gly Arg Cys Ser His His His Ser Arg His
   1010                1015                1020
Arg Ser Gly Val Glu Leu Asp Trp Val Arg His His Tyr Thr Glu Gly
1025                1030                1035                1040
Glu Arg Gly Trp Gly Arg Glu Lys Phe Tyr Pro Asp Arg Pro Arg Trp
                1045                1050                1055
Asp Arg Cys Arg Tyr Tyr His Asp Arg Tyr Ala Leu Tyr Ala Ala Arg
            1060                1065                1070
Asp Trp Lys Pro Phe His Gly Gly Arg Glu His Glu Arg Ala Gly Leu
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His Glu Arg Pro His Lys Asp His Asn Arg Gly Arg Arg Gly Cys Glu
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Pro Ala Arg Glu Arg Glu Arg His Arg Pro Ser Ser Pro Arg Ala Gly
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Ala Pro His Ala Leu Ala Pro His Pro Asp Arg Phe Ser His Asp Arg
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Thr Ala Leu Val Ala Gly Asp Asn Cys Asn Leu Ser Asp Arg Phe His
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Glu His Glu Asn Gly Lys Ser Arg Lys Arg Arg His Asp Ser Val Glu
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<212> DNA
<213> Homo sapiens

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<221> CDS
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<212> PRT
<213> Homo sapiens

<400> 17171
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Thr Tyr Ile Pro Phe Tyr Gly Ile Leu Gly Ala Leu Leu Phe Leu Asn
35 40 45
Phe Ile Arg Phe Leu Glu Ser His Trp Phe Val Trp Val Thr Gln Met
50 55 60
Asn His Ile Val Met Glu Ile Asp Gln Glu Ala Tyr Arg Asp Trp Phe

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Asp Trp Phe Ser Gly His Leu Ser Leu Gln Ile Glu His His Leu Phe
            100                 105                 110
Pro Thr Met Pro Arg His Asn Leu His Lys Ile Ala Pro Leu Val Lys
        115                 120                 125
Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Glu Lys Pro Leu Leu
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<210> 17172
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (718)..(2778)

<400> 17172

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ttctg 3725

<210> 17173
<211> 687
<212> PRT
<213> Homo sapiens

<400> 17173

09529460.070800

0020040650 .02.08

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Leu Arg Ser Lys Ser Leu Pro Ala Leu Ser Ser Ala Ser Cys Arg Pro
        35                  40                  45
Ser Leu Ser Pro Thr Ser Gly Asp Ala Asn Pro Ala Phe Gly Cys Val
    50                  55                  60
Asp Ser Ser Gly His Gln Glu Leu Lys Gln Gly Pro Asn Pro Leu Ala
65                  70                  75                  80
Pro Ser Pro Ser Ala Pro Ser Thr Ser Ala Gly Leu Gly Asp Cys Asn
                85                  90                  95
His Arg Val Asp Leu Ser Lys Thr Phe Ser Val Ser Ser Ala Leu Ala
            100                 105                 110
Met Leu Gln Glu Arg Arg Cys Leu Tyr Val Val Leu Thr Asp Ser Arg
        115                 120                 125
Cys Phe Leu Val Cys Met Cys Phe Leu Thr Phe Ile Gln Ala Leu Met
    130                 135                 140
Val Ser Gly Tyr Leu Ser Ser Val Ile Thr Thr Ile Glu Arg Arg Tyr
145                 150                 155                 160
Ser Leu Lys Ser Ser Glu Ser Gly Leu Leu Val Ser Cys Phe Asp Ile
                165                 170                 175
Gly Asn Leu Val Val Val Val Phe Val Ser Tyr Phe Gly Gly Arg Gly
            180                 185                 190
Arg Arg Pro Leu Trp Leu Ala Val Gly Gly Leu Leu Ile Ala Phe Gly
        195                 200                 205
Ala Ala Leu Phe Ala Leu Pro His Phe Ile Ser Pro Pro Tyr Gln Ile
    210                 215                 220
Gln Glu Leu Asn Ala Ser Ala Pro Asn Asp Gly Leu Cys Gln Gly Gly
225                 230                 235                 240
Asn Ser Thr Ala Thr Leu Glu Pro Pro Ala Cys Pro Lys Asp Ser Gly
                245                 250                 255
Gly Asn Asn His Trp Val Tyr Val Ala Leu Phe Ile Cys Ala Gln Ile
            260                 265                 270
Leu Ile Gly Met Gly Ser Thr Pro Ile Tyr Thr Leu Gly Pro Thr Tyr
        275                 280                 285
Leu Asp Asp Asn Val Lys Lys Glu Asn Ser Ser Leu Tyr Leu Ala Ile
    290                 295                 300
Met Tyr Val Met Gly Ala Leu Gly Pro Ala Val Gly Tyr Leu Leu Gly
305                 310                 315                 320
Gly Leu Leu Ile Gly Phe Tyr Val Asp Pro Arg Asn Pro Val His Leu
                325                 330                 335
Asp Gln Asn Asp Pro Arg Phe Ile Gly Asn Trp Trp Ser Gly Phe Leu
            340                 345                 350
Leu Cys Ala Ile Ala Met Phe Leu Val Ile Phe Pro Met Phe Thr Phe
        355                 360                 365
Pro Lys Lys Leu Pro Pro Arg His Lys Lys Lys Lys Lys Lys Lys Phe
    370                 375                 380
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Ser Val Asp Ala Val Ser Asp Asp Asp Val Leu Lys Glu Lys Ser Asn
385                 390                 395                 400
Asn Ser Glu Gln Ala Asp Lys Lys Val Ser Ser Met Gly Phe Gly Lys
                405                 410                 415
Asp Val Arg Asp Leu Pro Arg Ala Ala Val Arg Ile Leu Ser Asn Met
            420                 425                 430
Thr Phe Leu Phe Val Ser Leu Ser Tyr Thr Ala Glu Ser Ala Ile Val
        435                 440                 445
Thr Ala Phe Ile Thr Phe Ile Pro Glu Phe Ile Glu Ser Gln Phe Gly
    450                 455                 460
Ile Pro Ala Ser Asn Ala Ser Ile Tyr Thr Gly Val Ile Ile Val Pro
465                 470                 475                 480
Ser Ala Gly Val Gly Ile Val Leu Gly Gly Tyr Ile Ile Lys Lys Leu
                485                 490                 495
Lys Leu Gly Ala Arg Glu Ser Ala Lys Leu Ala Met Ile Cys Ser Gly
            500                 505                 510
Val Ser Leu Leu Cys Phe Ser Thr Leu Phe Ile Val Gly Cys Glu Ser
        515                 520                 525
Ile Asn Leu Gly Gly Ile Asn Ile Pro Tyr Thr Thr Gly Pro Ser Leu
    530                 535                 540
Thr Met Pro His Arg Asn Leu Thr Gly Ser Cys Asn Val Asn Cys Gly
545                 550                 555                 560
Cys Lys Ile His Glu Tyr Glu Pro Val Cys Gly Ser Asp Gly Ile Thr
                565                 570                 575
Tyr Phe Asn Pro Cys Leu Ala Gly Cys Val Asn Ser Gly Asn Leu Ser
            580                 585                 590
Thr Gly Ile Arg Asn Tyr Thr Glu Cys Thr Cys Val Gln Ser Arg Gln
        595                 600                 605
Val Ile Thr Pro Pro Thr Val Gly Gln Arg Ser Gln Leu Arg Val Val
    610                 615                 620
Ile Val Lys Thr Tyr Leu Asn Glu Asn Gly Tyr Ala Val Ser Gly Lys
625                 630                 635                 640
Cys Lys Arg Thr Cys Asn Thr Leu Ile Pro Phe Leu Val Phe Leu Phe
                645                 650                 655
Ile Val Thr Phe Ile Thr Ala Cys Ala Gln Pro Ser Ala Ile Ile Val
            660                 665                 670
Thr Leu Ser Ile His Ser Tyr Ser Asn Leu Leu Trp Ser Ser His
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<210> 17174
<211> 1687
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (104)..(1687)

0960960.0703800

0090204950

<400> 17174
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caggtaccgg ctgagctgct cgctccgggg ccacgagctg gacgtacggg gcctggtgtg 180
ctgcgcctat ccgccgggag cctttgtgtc cgtgtcccga gaccgcacca cccgcctctg 240
ggccccagac agtccaaaca ggagctttac agaaatgcac tgtatgagtg gccattccaa 300
ttttgtatct tgtgtatgca tcataccctc aagtgacatc taccctcatg gcctaattgc 360
caccggtgga aatgaccaca atatatgcat tttctcactg gacagtccaa tgccacttta 420
tattctaaaa ggccacaaaa atactgtttg tagtctatca tctggaaaat ttgggacatt 480
acttagtggt tcatgggaca ccactgctaa agtctggctg aatgacaagt gcatgatgac 540
cttgcagggt catacagctg cagtgtgggc ggtaaagatc ttacctgaac agggcttaat 600
gttgactgga tcagcagaca agactgttaa actgtggaag gctggaagat gtgagaggac 660
tttttcaggg catgaagact gtgtaagagg tttggcaatt ttgagtgaaa cagaatttct 720
ttcctgtgca aatgatgcta gtattagaag gtggcaaatc actggcgagt gtcttgaagt 780
atattatgga catacaaatt atatttatag catatccgtt tttccaaatt gtagagactt 840
tgtgacaaca gcagaggaca gatctctgag aatctggaaa catggggaat gtgctcaaac 900
tatccgactt ccagctcagt ctatatggtg ctgctgtgtg ctcgacaatg gtgacattgt 960
ggttggtgcg agtgatggca ttattagagt gtttacagaa tcagaagatc gaacagcaag 1020
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tggcgattta ggggacatca atgctgagca gcttcctggg agggaacatc ttaatgaacc 1140
tggtactaga gaaggacaga ctcgtctaat cagagatggg gagaaagtcg aagcctatca 1200
gtggagtgtt agtgaaggga ggtggataaa aattggtgat gttgttggct catctggtgc 1260
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tgcatct 1687

<210> 17175
<211> 528
<212> PRT
<213> Homo sapiens

<400> 17175
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His Glu Leu Asp Val Arg Gly Leu Val Cys Cys Ala Tyr Pro Pro Gly
20 25 30
Ala Phe Val Ser Val Ser Arg Asp Arg Thr Thr Arg Leu Trp Ala Pro
35 40 45
Asp Ser Pro Asn Arg Ser Phe Thr Glu Met His Cys Met Ser Gly His
50 55 60
Ser Asn Phe Val Ser Cys Val Cys Ile Ile Pro Ser Ser Asp Ile Tyr

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 65                  70                  75                  80
Pro His Gly Leu Ile Ala Thr Gly Gly Asn Asp His Asn Ile Cys Ile
                85                  90                  95
Phe Ser Leu Asp Ser Pro Met Pro Leu Tyr Ile Leu Lys Gly His Lys
            100                 105                 110
Asn Thr Val Cys Ser Leu Ser Ser Gly Lys Phe Gly Thr Leu Leu Ser
        115                 120                 125
Gly Ser Trp Asp Thr Thr Ala Lys Val Trp Leu Asn Asp Lys Cys Met
    130                 135                 140
Met Thr Leu Gln Gly His Thr Ala Ala Val Trp Ala Val Lys Ile Leu
145                 150                 155                 160
Pro Glu Gln Gly Leu Met Leu Thr Gly Ser Ala Asp Lys Thr Val Lys
                165                 170                 175
Leu Trp Lys Ala Gly Arg Cys Glu Arg Thr Phe Ser Gly His Glu Asp
            180                 185                 190
Cys Val Arg Gly Leu Ala Ile Leu Ser Glu Thr Glu Phe Leu Ser Cys
        195                 200                 205
Ala Asn Asp Ala Ser Ile Arg Arg Trp Gln Ile Thr Gly Glu Cys Leu
    210                 215                 220
Glu Val Tyr Tyr Gly His Thr Asn Tyr Ile Tyr Ser Ile Ser Val Phe
225                 230                 235                 240
Pro Asn Cys Arg Asp Phe Val Thr Thr Ala Glu Asp Arg Ser Leu Arg
                245                 250                 255
Ile Trp Lys His Gly Glu Cys Ala Gln Thr Ile Arg Leu Pro Ala Gln
            260                 265                 270
Ser Ile Trp Cys Cys Cys Val Leu Asp Asn Gly Asp Ile Val Val Gly
        275                 280                 285
Ala Ser Asp Gly Ile Ile Arg Val Phe Thr Glu Ser Glu Asp Arg Thr
    290                 295                 300
Ala Ser Ala Glu Glu Ile Lys Ala Phe Glu Lys Glu Leu Ser His Ala
305                 310                 315                 320
Thr Ile Asp Ser Lys Thr Gly Asp Leu Gly Asp Ile Asn Ala Glu Gln
                325                 330                 335
Leu Pro Gly Arg Glu His Leu Asn Glu Pro Gly Thr Arg Glu Gly Gln
            340                 345                 350
Thr Arg Leu Ile Arg Asp Gly Glu Lys Val Glu Ala Tyr Gln Trp Ser
        355                 360                 365
Val Ser Glu Gly Arg Trp Ile Lys Ile Gly Asp Val Val Gly Ser Ser
    370                 375                 380
Gly Ala Asn Gln Gln Thr Ser Gly Lys Val Leu Tyr Glu Gly Lys Glu
385                 390                 395                 400
Phe Asp Tyr Val Phe Ser Ile Asp Val Asn Glu Gly Gly Pro Ser Tyr
                405                 410                 415
Lys Leu Pro Tyr Asn Thr Ser Asp Asp Pro Trp Leu Thr Ala Tyr Asn
            420                 425                 430
Phe Leu Gln Lys Asn Asp Leu Asn Pro Met Phe Leu Asp Gln Val Ala
        435                 440                 445
Lys Phe Ile Ile Asp Asn Thr Lys Gly Gln Met Leu Gly Leu Gly Asn
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0050450.0050800

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    450                 455                 460
Pro Ser Phe Ser Asp Pro Phe Thr Gly Gly Gly Arg Tyr Val Pro Gly
465                 470                 475                 480
Ser Ser Gly Ser Ser Asn Thr Leu Pro Thr Ala Asp Pro Phe Thr Gly
                485                 490                 495
Ala Gly Arg Tyr Val Pro Gly Ser Ala Ser Met Gly Thr Thr Met Thr
            500                 505                 510
Gly Val Asp Pro Phe Thr Gly Asn Ser Ala Tyr Arg Ser Ala Ala Ser
        515                 520                 525
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<210> 17176
<211> 1317
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (67)..(930)

<400> 17176
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ttctgtgcta tggtcctggc tgacttcggg gcgcgtgtgg tacgcgtgga ccggcccggc 180
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gtcattgatg caaatatggt ggaaggaaca gcatatttaa gttcttttct gtggaaaact 660
cagaaatcga gtctgtggga agcacctcga ggacagaaca tgttggatgg tggagcacct 720
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ctgccgttga acttggctct ctcacagcag agcagtttga tgaatgggta aaacctaagg 1260
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<210> 17177
<211> 288
<212> PRT

<213> Homo sapiens

<400> 17177

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Met Ala Leu Gln Gly Ile Ser Val Met Glu Leu Ser Gly Leu Ala Pro
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Gly Pro Phe Cys Ala Met Val Leu Ala Asp Phe Gly Ala Arg Val Val
             20                  25                  30
Arg Val Asp Arg Pro Gly Ser Arg Tyr Asp Val Ser Arg Leu Gly Arg
         35                  40                  45
Gly Lys Arg Ser Leu Val Leu Asp Leu Lys Gln Pro Arg Gly Ala Ala
     50                  55                  60
Val Leu Arg Arg Leu Cys Lys Arg Ser Asp Val Leu Leu Glu Pro Phe
 65                  70                  75                  80
Arg Arg Gly Val Met Glu Lys Leu Gln Leu Gly Pro Glu Ile Leu Gln
                 85                  90                  95
Arg Glu Asn Pro Arg Leu Ile Tyr Ala Arg Leu Ser Gly Phe Gly Gln
            100                 105                 110
Ser Gly Ser Phe Cys Arg Leu Ala Gly His Asp Ile Asn Tyr Leu Ala
        115                 120                 125
Leu Ser Gly Val Leu Ser Lys Ile Gly Arg Ser Gly Glu Asn Pro Tyr
    130                 135                 140
Ala Pro Leu Asn Leu Leu Ala Asp Phe Ala Gly Gly Gly Leu Met Cys
145                 150                 155                 160
Ala Leu Gly Ile Ile Met Ala Leu Phe Asp Arg Thr Arg Thr Asp Lys
                165                 170                 175
Gly Gln Val Ile Asp Ala Asn Met Val Glu Gly Thr Ala Tyr Leu Ser
            180                 185                 190
Ser Phe Leu Trp Lys Thr Gln Lys Ser Ser Leu Trp Glu Ala Pro Arg
        195                 200                 205
Gly Gln Asn Met Leu Asp Gly Gly Ala Pro Phe Tyr Thr Thr Tyr Arg
    210                 215                 220
Thr Ala Asp Gly Glu Phe Met Ala Val Gly Ala Ile Glu Pro Gln Phe
225                 230                 235                 240
Tyr Glu Leu Leu Ile Lys Gly Leu Gly Glu Leu Ile Leu Leu Lys Ile
                245                 250                 255
Gln Gln Glu Ala Val Ser Cys Gln Ala Arg Gln Thr Leu Val Ser Val
            260                 265                 270
Lys Gln Trp Pro Ser Leu Gln Pro Lys Ser Trp Gly Phe Val Trp Gln
        275                 280                 285
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<210> 17178
<211> 1829
<212> DNA
<213> Homo sapiens

<220>
<221> CDS

09529800.0052

<222> (373)..(1701)

<400> 17178
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taccctgtta gagctgaggc gcaggtaaaa tgactggccc aggccggtcc caccccgtaa 180
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gctcaagaag aaatggccct tttagaagct gtgatggact gtggctttgg aaattggcag 660
gatgtagcca atcaaatgtg caccaagacc aaggaggagt gtgagaagca ctatgtgaag 720
catttcatca ataaccctct gtttgcatct accctgctga acctgaaaca agcagaggaa 780
gcaaaaactg ctgacacagc cattccattt cactctacag atgaccctcc ccgacctacc 840
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gaggaatttg acaattatgc agaatgggac ttgagagaca ttgattttgt tgaagatgac 960
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gagagacaaa gacgaaaaaa aattataaga gaccatggat taatcaacct tagaaagttt 1080
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tttgaactcc gaagggaaat caagaggctc caagaataca ggacagcagg cattaccaat 1260
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gaaggataca tcactaaagg ctaaggctcc aagagcttgg gctcagaagt cagaagtttg 1740
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attctcatgg tgaaaacagg ggaaaggac 1829

<210> 17179
<211> 443
<212> PRT
<213> Homo sapiens

<400> 17179
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20 25 30
Glu Cys Gly Pro Pro Pro Phe Phe Leu Cys Leu Gln Cys Phe Thr Arg
35 40 45

0050450-0050800

Gly Phe Glu Tyr Lys Lys His Gln Ser Asp His Thr Tyr Glu Ile Met
50 55 60
Thr Ser Asp Phe Pro Val Leu Asp Pro Ser Trp Thr Ala Gln Glu Glu
65 70 75 80
Met Ala Leu Leu Glu Ala Val Met Asp Cys Gly Phe Gly Asn Trp Gln
85 90 95
Asp Val Ala Asn Gln Met Cys Thr Lys Thr Lys Glu Glu Cys Glu Lys
100 105 110
His Tyr Val Lys His Phe Ile Asn Asn Pro Leu Phe Ala Ser Thr Leu
115 120 125
Leu Asn Leu Lys Gln Ala Glu Glu Ala Lys Thr Ala Asp Thr Ala Ile
130 135 140
Pro Phe His Ser Thr Asp Asp Pro Pro Arg Pro Thr Phe Asp Ser Leu
145 150 155 160
Leu Ser Arg Asp Met Ala Gly Tyr Met Pro Ala Arg Ala Asp Phe Ile
165 170 175
Glu Glu Phe Asp Asn Tyr Ala Glu Trp Asp Leu Arg Asp Ile Asp Phe
180 185 190
Val Glu Asp Asp Ser Asp Ile Leu His Ala Leu Lys Met Ala Val Val
195 200 205
Asp Ile Tyr His Ser Arg Leu Lys Glu Arg Gln Arg Arg Lys Lys Ile
210 215 220
Ile Arg Asp His Gly Leu Ile Asn Leu Arg Lys Phe Gln Leu Met Glu
225 230 235 240
Arg Arg Tyr Pro Lys Glu Val Gln Asp Leu Tyr Glu Thr Met Arg Arg
245 250 255
Phe Ala Arg Ile Val Gly Pro Val Glu His Asp Lys Phe Ile Glu Ser
260 265 270
His Ala Leu Glu Phe Glu Leu Arg Arg Glu Ile Lys Arg Leu Gln Glu
275 280 285
Tyr Arg Thr Ala Gly Ile Thr Asn Phe Cys Ser Ala Arg Thr Tyr Asp
290 295 300
His Leu Lys Lys Thr Arg Glu Glu Glu Arg Leu Lys Arg Thr Met Leu
305 310 315 320
Ser Glu Val Leu Gln Tyr Ile Gln Asp Ser Ser Ala Cys Gln Gln Trp
325 330 335
Leu Arg Arg Gln Ala Asp Ile Asp Ser Gly Leu Ser Pro Ser Ile Pro
340 345 350
Met Ala Ser Asn Ser Gly Arg Arg Ser Ala Pro Pro Leu Asn Leu Thr
355 360 365
Gly Leu Pro Gly Thr Glu Lys Leu Asn Glu Lys Glu Lys Glu Leu Cys
370 375 380
Gln Met Val Arg Leu Val Pro Gly Ala Tyr Leu Glu Tyr Lys Ser Ala
385 390 395 400
Leu Leu Asn Glu Cys Asn Lys Gln Gly Gly Leu Arg Leu Ala Gln Ala
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Arg Ala Leu Ile Lys Ile Asp Val Asn Lys Thr Arg Lys Ile Tyr Asp
420 425 430

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Phe Leu Ile Arg Glu Gly Tyr Ile Thr Lys Gly
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<222> (95)..(1573)

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<212> PRT
<213> Homo sapiens

<400> 17181

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Asp Asp Asp Asp Asp Leu Glu Arg Val Ser Trp Ser Gly Glu Pro Val
     50                  55                  60
Gly Ser Ile Ser Trp Ser Ile Arg Glu Thr Ala Gly Asn Ser Gly Ser
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Thr His Glu Gly Arg Glu Gln Leu Lys Ser Arg Asn Ser Phe Ser Ser
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Tyr Ala Gln Leu Pro Lys Pro Thr Ser Thr Tyr Ser Leu Ser Ser Phe
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Phe Arg Gly Arg Thr Arg Pro Gly Ser Phe Gln Ser Leu Ser Asp Ala
        115                 120                 125
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Lys Gly Glu Tyr Arg Asp Tyr Ser Asn Asp Trp Ser Pro Ser Asp Thr
145                 150                 155                 160
Val Arg Arg Leu Arg Lys Gly Lys Val Cys Ser Leu Glu Arg Phe Arg
                165                 170                 175
Ser Leu Gln Asp Lys Leu Gln Leu Leu Glu Glu Ala Val Ser Met His
            180                 185                 190
Asp Gly Asn Val Ile Thr Ala Val Leu Ile Phe Leu Lys Arg Thr Leu
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Ser Lys Glu Ile Leu Phe Arg Glu Leu Glu Val Arg Gln Val Ala Leu
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Arg His Leu Ile His Phe Leu Lys Glu Ile Gly Asp Gln Lys Leu Leu
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0050450-050800

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His Tyr Arg Glu His Leu Asn Ile Gln Asp Pro Asp Lys Arg Lys Glu
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Lys His Pro Arg Lys Ala Ser Ile Leu Asn Met Pro Leu Val Thr Thr
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Tyr Val Leu Thr Ala Leu Ala Ala Arg Ala Lys Leu Arg Ala Trp Asn
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385                 390                 395                 400
Lys Arg Ala Pro Ile Gly Phe His Arg Val Val Glu Ile Leu His Lys
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Asn Asn Ala Pro Val Gln Ile Leu Gln Glu Tyr Val Asn Leu Val Glu
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Asp Val Asp Thr Lys Leu Asn Leu Ala Thr Lys Phe Lys Cys His Asp
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Val Val Ile Asp Thr Tyr Arg Asp Leu Lys Asp Arg Gln Gln Leu Leu
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<210> 17182
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<212> DNA
<213> Homo sapiens

<400> 17182

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tcttagtatt ccctccaggc ttgggcaggg agactcgcag atgcacaccc acaagtattc 600
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<212> DNA
<213> Homo sapiens

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<222> (92)..(649)

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35 40 45
His Gly Gln Ser Arg Ile Ile Arg Lys Ala Tyr Leu Glu Asp Phe Tyr
50 55 60

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Thr Arg Met Met His Glu Cys Tyr Gln Ile Trp Ala Gln Leu Glu His
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Glu Ala Gly Thr Gln Leu His Arg Gln Thr Gly Leu Leu Leu Leu Gly
85 90 95
Met Lys Glu Asn Gln Glu Leu Lys Thr Ile Gln Ala Asn Leu Ser Arg
100 105 110
Gln Arg Val Glu His Gln Cys Leu Ser Ser Glu Glu Leu Lys Gln Arg
115 120 125
Phe Pro Asn Ile Arg Leu Pro Arg Gly Glu Val Gly Leu Leu Asp Asn
130 135 140
Ser Gly Gly Val Ile Tyr Ala Tyr Lys Ala Leu Arg Ala Leu Gln Asp
145 150 155 160
Ala Ile Arg Gln Leu Gly Gly Ile Val Arg Asp Gly Glu Lys Val Val
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Glu Ile Asn Pro Gly Leu Leu Val Thr Val
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<212> DNA
<213> Homo sapiens

<220>
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<211> 547
<212> PRT
<213> Homo sapiens

<400> 17186
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35 40 45
Ala Arg Ala Arg Thr Gly Ser Gly Lys Thr Ala Ala Tyr Ala Ile Pro
50 55 60
Met Leu Gln Leu Leu Leu His Arg Lys Ala Thr Gly Pro Val Val Glu
65 70 75 80
Gln Ala Val Arg Gly Leu Val Leu Val Pro Thr Lys Glu Leu Ala Arg
85 90 95
Gln Ala Gln Ser Met Ile Gln Gln Leu Ala Thr Tyr Cys Ala Arg Asp
100 105 110
Val Arg Val Ala Asn Val Ser Ala Ala Glu Asp Ser Val Ser Gln Arg
115 120 125
Ala Val Leu Met Glu Lys Pro Asp Val Val Val Gly Thr Pro Ser Arg
130 135 140
Thr Leu Ser His Leu Gln Gln Asp Ser Leu Lys Leu Arg Asp Ser Leu
145 150 155 160
Glu Leu Leu Val Val Asp Glu Ala Asp Leu Leu Phe Ser Phe Gly Phe
165 170 175
Glu Glu Glu Leu Lys Ser Leu Leu Cys His Leu Pro Arg Ile Tyr Gln
180 185 190
Ala Phe Leu Met Ser Ala Thr Phe Asn Glu Asp Val Gln Ala Leu Lys
195 200 205
Glu Leu Ile Leu His Asn Pro Val Thr Leu Lys Leu Gln Glu Ser Gln
210 215 220
Leu Pro Gly Pro Asp Gln Leu Gln Gln Phe Gln Val Val Cys Glu Thr

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Ile Arg Gly Lys Ser Leu Leu Phe Val Asn Thr Leu Glu Arg Ser Tyr
            260                 265                 270
Arg Leu Arg Leu Phe Leu Glu Gln Phe Ser Ile Pro Thr Cys Val Leu
        275                 280                 285
Asn Gly Glu Leu Pro Leu Arg Ser Arg Cys His Ile Ile Ser Gln Phe
    290                 295                 300
Asn Gln Gly Phe Tyr Asp Cys Val Ile Ala Thr Asp Ala Glu Val Leu
305                 310                 315                 320
Gly Ala Pro Val Lys Gly Lys Arg Arg Gly Arg Gly Pro Lys Gly Asp
                325                 330                 335
Lys Ala Ser Asp Pro Glu Ala Gly Val Ala Arg Gly Ile Asp Phe His
            340                 345                 350
His Val Ser Ala Val Leu Asn Phe Asp Leu Pro Pro Thr Pro Glu Ala
        355                 360                 365
Tyr Ile His Arg Ala Gly Arg Thr Ala Arg Ala Asn Asn Pro Gly Ile
    370                 375                 380
Val Leu Thr Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile
385                 390                 395                 400
Glu Glu Leu Leu Ser Gly Glu Asn Arg Gly Pro Ile Leu Leu Pro Tyr
                405                 410                 415
Gln Phe Arg Met Glu Glu Ile Glu Gly Phe Arg Tyr Arg Cys Arg Asp
            420                 425                 430
Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu Lys
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Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr Phe
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Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro Leu
465                 470                 475                 480
His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr Leu
                485                 490                 495
Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg Lys
            500                 505                 510
Lys Leu Ser Ser Ser Cys Arg Lys Ala Lys Arg Ala Lys Ser Gln Asn
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Pro Leu Arg Ser Phe Lys His Lys Gly Lys Lys Phe Arg Pro Thr Ala
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<211> 3310
<212> DNA
<213> Homo sapiens

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Thr	Asp	Ser	Arg	Gly	Glu	Phe	Cys	Gly	Gln	Lys	Gly	Thr	Lys	Asn	Glu
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Tyr	Lys	Gly	Val	Leu	Met	Val	Gly	Asn	Glu	Thr	Thr	Tyr	Glu	Asp	Gly
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His	Gly	Ser	Arg	Lys	Asn	Ile	Thr	Asp	Leu	Val	Glu	Gly	Ala	Lys	Lys
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            260                 265                 270
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        275                 280                 285
Gly Ser Asp Val Ser Leu Val Asp Leu Gly Phe Gln Thr Asp Phe Arg
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Val Tyr Leu His Leu Arg Gln Thr Trp Leu Ala Phe Met Ile Ile Leu
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Thr Ser Asn Glu Ala Val Tyr Lys Ile Phe Asp Asp Ser Pro Cys Pro
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Phe Thr Ala Lys Thr Cys Asn Pro Glu Thr Phe Pro Ser Ser Asn Glu
                405                 410                 415
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Glu Ser Gly Tyr His Arg Ala Leu Leu Gly Leu Gln Ile Phe Asn Ala
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Phe Met Phe Phe Trp Leu Ala Asn Phe Val Leu Ala Leu Gly Gln Val
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Thr Leu Ala Gly Ala Phe Ala Ser Tyr Tyr Trp Ala Leu Arg Lys Pro
465                 470                 475                 480
Asp Asp Leu Pro Ala Phe Pro Leu Phe Ser Ala Phe Gly Arg Ala Leu
                485                 490                 495
Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala Leu Ile Leu Ala Ile
            500                 505                 510
Val Gln Ile Ile Arg Val Ile Leu Glu Tyr Leu Asp Gln Arg Leu Lys
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Cys Phe Trp Cys Leu Glu Lys Phe Ile Lys Phe Leu Asn Arg Asn Ala
545                 550                 555                 560
Tyr Ile Met Ile Ala Ile Tyr Gly Thr Asn Phe Cys Thr Ser Ala Arg
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Leu Thr Val Ile Val Gly Ser Tyr Leu Ile Ala His Gly Phe Phe Ser
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Val Tyr Gly Met Cys Val Asp Thr Leu Phe Leu Cys Phe Leu Glu Asp
            660                 665                 670
Leu Glu Arg Asn Asp Gly Ser Ala Glu Arg Pro Tyr Phe Met Ser Ser
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<211> 2334
<212> DNA
<213> Homo sapiens

<400> 17189

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<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 17191

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225					230					235					240
Phe	Leu	Glu	Thr	Val	Lys	Glu	Leu	Arg	Lys	Ser	Gln	Gly	Pro	Leu	Glu
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Phe Pro Lys Gln Thr Ala Ala Gln Val Thr Leu Lys Ala Ile Ser Ala
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His Phe Asp Asp Ser Ser Ala Ser Ser Leu Lys Asn Val Tyr Phe Leu
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<212> DNA
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<213> Homo sapiens

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Asp Leu Arg Asp Tyr Gly Ala Gln Gly Asp Cys Asp Pro Glu Ala Pro
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Met Thr Glu Gly Thr Arg Cys Cys Arg Gln Glu Met Tyr Ile Asp Leu
            260                 265                 270
Gln Gly Met Lys Trp Ala Lys Asn Trp Val Leu Glu Pro Pro Gly Phe
        275                 280                 285
Leu Ala Tyr Glu Cys Val Gly Thr Cys Gln Gln Pro Pro Glu Ala Leu
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<212> PRT
<213> Homo sapiens

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Val Leu Ile Asn Leu Phe Ser Phe Phe Leu Thr Pro Ser Phe Trp Arg
50 55 60
Gln Leu Gly Ala Ile Leu Val Tyr Ala Ser Leu Leu Ala Glu Lys Thr
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Pro Phe Lys Thr Gln Arg Thr Leu Glu Gly Asp Ala Leu Val Gly Ser
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     50                  55                  60
Gln Asp Ala Thr Asp Pro Phe Val Ala Phe His Ile Asn Lys Gly Leu
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Val Lys Lys Tyr Met Asn Ser Leu Leu Ile Gly Glu Leu Ser Pro Glu
                 85                  90                  95
Gln Pro Ser Phe Glu Pro Thr Lys Asn Lys Glu Leu Thr Asp Glu Phe
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Arg Glu Leu Arg Ala Thr Val Glu Arg Met Gly Leu Met Lys Ala Asn
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His Val Phe Phe Leu Leu Tyr Leu Leu His Ile Leu Leu Leu Asp Gly
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Leu Gln His Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp
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Asn His Leu Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro
        195                 200                 205
Ala Ser Trp Arg Asn His Met His Phe Gln His His Ala Lys Pro Asn
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Cys Phe Arg Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Phe Ala
225                 230                 235                 240
Leu Gly Lys Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr
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Ser Ala Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu
370 375 380
His His Leu Phe Pro Thr Met Pro Arg His Asn Tyr His Lys Val Ala
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Pro Leu Val Gln Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Ser
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<213> Homo sapiens

<400> 17215

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Ser Lys Leu Val Met Gly Leu Gly Ile Thr Val Cys Ile Phe Ile Met
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His Phe Pro Ile Tyr Tyr Leu Met Ala Asn Leu Ala Ala Ala Asp Phe
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Phe Ala Gly Leu Ala Tyr Phe Tyr Leu Met Phe Asn Thr Gly Pro Asn
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Thr Arg Arg Leu Thr Val Ser Thr Trp Leu Leu Arg Gln Gly Leu Ile
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Asp Thr Ser Leu Thr Ala Ser Val Ala Asn Leu Leu Ala Ile Ala Ile
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Glu Arg His Ile Thr Val Phe Arg Met Gln Leu His Thr Arg Met Ser
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Val Met Gly Ala Ile Pro Ser Val Gly Trp Asn Cys Ile Cys Asp Ile
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Val Leu Ala Tyr Glu Lys Phe Phe Leu Leu Leu Ala Glu Phe Asn Ser
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<213> Homo sapiens

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<222> (446)..(919)

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Gly Ala Cys Asp Trp Thr Tyr Glu Val Cys Thr Glu Leu His Leu Asn
50 55 60
Asp Thr Phe Pro Ile Pro Phe Pro Pro Arg Lys His Arg Phe Arg Val
65 70 75 80
Ile Gln Ser Ser Ala Ser Trp Leu Lys Leu Leu Ile Ser Ser Ala Asp
85 90 95
Val Tyr Tyr Pro Val Tyr Leu Met His Tyr Tyr Val Leu Ile Leu His
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Glu Thr Glu Arg Glu Arg Asp Tyr Gln Ile Val Tyr Thr Gln Arg Val
115 120 125
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0052-0052-0052-0052-0052

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<213> Homo sapiens

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<400> 17219

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Cys	Pro	Ala	Asn	Val	Val	Phe	Leu	Val	Glu	Met	Gly	Phe	Leu	His	Val
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Glu	Phe	Ala	Ser	Leu	Thr	Val	Ser	Gln	Ala	Val	Leu	Arg	Met	Leu	Val
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Trp	Gly	Pro	Gln	Phe	Glu	Asn	His	Cys	Ser	Lys	Leu	Leu	Met	Ala	Ser
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<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 17221

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        35                  40                  45
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    50                  55                  60
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65                  70                  75                  80
Glu Leu Ser Arg Tyr Gln Thr Lys Phe Arg His Leu Ser Lys Glu Glu
                85                  90                  95
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            100                 105                 110
Leu Leu Asp Ile Lys Tyr Leu Ser Pro Leu Leu Leu Ala Tyr Glu Asp
        115                 120                 125
Met Met Lys Glu Lys Asp Glu Leu Asn Ala Thr Leu Lys Glu Glu Met
    130                 135                 140
Arg Met Phe Arg Met Arg Ala Gln Glu Val Val Lys Glu Asn Glu Glu
145                 150                 155                 160
Leu His Gln Glu Leu Asn Lys Ser Ser Ala Val Thr Ser Glu Glu Trp
                165                 170                 175
Arg Gln Leu Gln Thr Gln Ala Lys Leu Val Leu Glu Glu Asn Lys Leu
            180                 185                 190
Leu Leu Glu Gln Leu Glu Ile Gln Gln Arg Lys Ala Lys Asp Ser His
        195                 200                 205
Gln Glu Arg Leu Gln Glu Val Ser Lys Leu Thr Lys Gln Leu Met Leu
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Leu Glu Ala Lys Thr His Gly Gln Glu Lys Glu Leu Ala Glu Asn Arg
225                 230                 235                 240
Glu Gln Leu Glu Ile Leu Arg Ala Lys Cys Gln Glu Leu Lys Thr His
                245                 250                 255
Ser Asp Gly Lys Ile Ala Val Glu Val His Lys Ser Ile Val Asn Glu
            260                 265                 270
Leu Lys Ser Gln Leu Gln Lys Glu Glu Glu Lys Glu Arg Ala Glu Met
        275                 280                 285
Glu Glu Leu Met Glu Lys Leu Thr Val Leu Gln Ala Gln Lys Lys Ser
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Leu Leu Leu Glu Lys Asn Ser Leu Thr Glu Gln Asn Lys Ala Leu Glu
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355 360 365
Thr Gln Glu Arg Asp Ser Leu Met Cys Leu Ala Lys Cys Leu Glu Ser
370 375 380
Glu Lys Asp Gly Val Leu Asn Lys Val Ile Lys Ser Asn Ile Arg Leu
385 390 395 400
Gly Lys Leu Glu Glu Lys Val Lys Gly Tyr Lys Lys Gln Ala Ala Leu
405 410 415
Lys Leu Gly Asp Ile Ser His Arg Leu Leu Glu Gln Gln Glu Asp Phe
420 425 430
Ala Gly Lys Thr Ala Gln Tyr Arg Gln Glu Met Arg His Leu His Gln
435 440 445
Val Leu Lys Asp Lys Gln Glu Val Leu Asp Gln Ala Leu Gln Gln Asn
450 455 460
Arg Glu Met Glu Gly Glu Leu Glu Val Ile Trp Glu Ser Thr Phe Arg
465 470 475 480
Glu Asn Arg Arg Ile Arg Glu Leu Leu Gln Asp Thr Leu Thr Arg Thr
485 490 495
Gly Val Gln Asp Asn Pro Arg Ala Leu Val Ala Pro Ser Leu Asn Gly
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Leu Lys Ser His Ala Pro Thr Cys
530 535

<210> 17222
<211> 2396
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (304)..(873)

<400> 17222
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<211> 190
<212> PRT
<213> Homo sapiens

<400> 17223
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35 40 45
His Phe Leu Gln Ser Leu Thr His Arg Leu Val Leu Gly Gly Glu Leu
50 55 60

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Val Tyr His Arg Arg Pro Gly Glu Glu Gly Ala Ile Leu Thr Leu Ala
65 70 75 80
Gly Lys Tyr Ser Ala Val His Trp Val Ala Thr Leu Asn Val Gly Ser
85 90 95
Gly Gly Ala His Ala Ser Tyr Tyr His Arg Ala Asn Glu Gln Val Gln
100 105 110
Val Gly Val Glu Phe Glu Ala Asn Thr Arg Leu Gln Asp Thr Thr Phe
115 120 125
Ser Phe Gly Tyr His Leu Thr Leu Pro Gln Ala Asn Met Val Phe Arg
130 135 140
Gly Leu Val Asp Ser Asn Trp Cys Val Gly Ala Val Leu Glu Lys Lys
145 150 155 160
Met Pro Pro Leu Pro Val Thr Leu Ala Leu Gly Ala Phe Leu Asn His
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180 185 190

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<211> 2488
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (686)..(2287)

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atcaaaactc gctcggtgga gcagacgcta ctcccgctgg tttctcagat caccacgctt 240
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<211> 534
<212> PRT
<213> Homo sapiens

<400> 17225

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			20					25				30			
Lys	Cys	Thr	Met	Met	Leu	Leu	Thr	Ala	Ser	Lys	Thr	Cys	Leu	Arg	His
		35					40					45			
Pro	Asn	Cys	Glu	Ser	Ala	His	Lys	Asn	Lys	Glu	Gly	Val	Phe	Asp	Arg
	50					55					60				
Met	Lys	Val	Ala	Leu	Asp	Lys	Val	Ile	Glu	Ile	Val	Thr	Asp	Cys	Lys
65					70					75					80
Pro	Asn	Gly	Glu	Thr	Asp	Ile	Ser	Ser	Ile	Ser	Ile	Phe	Thr	Gly	Ile
				85					90					95	
Lys	Glu	Phe	Lys	Met	Asn	Ile	Glu	Ala	Leu	Arg	Glu	Asn	Leu	Tyr	Phe
			100					105					110		
Gln	Ser	Lys	Glu	Asn	Leu	Ser	Val	Thr	Leu	Glu	Val	Ile	Leu	Glu	Arg
		115					120					125			
Met	Glu	Asp	Phe	Thr	Asp	Ser	Ala	Tyr	Thr	Ser	His	Glu	His	Arg	Glu
	130					135					140				

Arg Ile Leu Glu Leu Ser Thr Gln Ala Arg Met Glu Leu Gln Gln Leu
145 150 155 160
Ile Ser Val Trp Ile Gln Ala Gln Ser Lys Lys Thr Lys Ser Ile Ala
165 170 175
Glu Glu Leu Glu Leu Ser Ile Leu Lys Ile Ser His Ser Leu Asn Glu
180 185 190
Leu Lys Lys Glu Pro His Ser Thr Ala Thr Gln Leu Ala Ala Asp Leu
195 200 205
Leu Lys Tyr His Ala Asp His Val Val Leu Lys Ala Leu Lys Leu Thr
210 215 220
Gly Val Glu Gly Asn Leu Glu Ala Leu Ala Glu Tyr Ala Cys Lys Leu
225 230 235 240
Ser Glu Gln Lys Glu Gln Leu Val Glu Thr Cys Arg Leu Leu Arg His
245 250 255
Ile Ser Gly Thr Glu Pro Leu Glu Ile Thr Cys Ile His Ala Glu Glu
260 265 270
Thr Phe Gln Val Ile Gly Gln Gln Ile Ile Ser Ala Ala Glu Thr Leu
275 280 285
Thr Leu His Pro Ser Ser Lys Ile Ala Lys Glu Asn Leu Asp Val Phe
290 295 300
Cys Glu Ala Trp Glu Ser Gln Ile Ser Asp Met Ser Thr Leu Leu Arg
305 310 315 320
Glu Ile Asn Asp Val Phe Glu Gly Arg Arg Gly Glu Lys Tyr Gly Tyr
325 330 335
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Lys Pro Asp Lys Pro Asp Ser Glu Glu Gln Ala Lys Ile Ala Lys Leu
355 360 365
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370 375 380
Lys Trp Glu Asp Gln Glu Asn Gly Ile Val Gln Tyr Gly Arg Asn Met
385 390 395 400
Ser Ser Met Ala Tyr Ser Leu Tyr Leu Phe Thr Arg Gly Glu Gly Pro
405 410 415
Leu Lys Thr Ser Gln Asp Leu Ile His Gln Leu Glu Val Phe Ala Ala
420 425 430
Glu Gly Leu Lys Leu Thr Ser Ser Val Gln Ala Phe Ser Lys Gln Leu
435 440 445
Lys Asp Asp Asp Lys Leu Met Leu Leu Leu Glu Ile Asn Lys Leu Ile
450 455 460
Pro Leu Cys His Gln Leu Gln Thr Val Thr Lys Thr Ser Leu Gln Asn
465 470 475 480
Lys Val Phe Leu Lys Val Asp Lys Cys Ile Thr Lys Thr Arg Ser Met
485 490 495
Met Ala Leu Leu Val Gln Leu Leu Ser Leu Cys Tyr Lys Leu Leu Lys
500 505 510
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Thr Met Asp Ser Lys Thr
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<210> 17226
<211> 2454
<212> DNA
<213> Homo sapiens

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<222> (90)..(1481)

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<212> PRT
<213> Homo sapiens

<400> 17227

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			20					25					30		
Gln	Tyr	Ser	Gln	His	Ile	Gln	Gly	Asn	Phe	Asn	Ala	Ser	Gly	Thr	Thr
		35					40					45			
Asp	Leu	Tyr	Val	Asp	Leu	Gln	His	Met	Glu	Asp	Asp	Ala	Gln	Asp	Ile
	50					55					60				
Phe	Ile	Pro	Lys	Lys	Pro	Asp	Tyr	Asp	Pro	Glu	Lys	Ala	Leu	Lys	Asp
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Ser	Leu	Gln	Pro	Tyr	Glu	Ala	Ala	Tyr	Leu	Ser	Lys	Ser	Leu	Ser	Arg
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	130					135					140				
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Leu	Ser	Thr	Gln	Gly	Asp	Ala	Ser	Gln	Val	Ile	Gly	Pro	Leu	Thr	Glu
				165					170					175	
Gly	Gln	Arg	Arg	Asn	Val	Ala	Val	Val	Asn	Ser	Leu	Tyr	Lys	Leu	His
			180					185					190		
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Glu	Asn	Ala	Val	Gln	Pro	Leu	Leu	Thr	Ser	Val	Gly	Asp	Ala	Ile	Glu
225					230					235					240
Ala	Ile	Ile	Ile	Thr	Met	His	Gln	Glu	Asp	Phe	Ser	Gly	Ser	Leu	Ser
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Val Glu Leu Phe Ile Arg His Ala Ser Leu Ile Arg Pro Leu Gly Glu
305                 310                 315                 320
Gly Gly Lys Met Arg Leu Ala Ala Asp Phe Ala Gln Met Glu Leu Ala
                325                 330                 335
Val Gly Pro Phe Cys Arg Arg Val Ser Asp Leu Gly Lys Ser Tyr Arg
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Met Leu Arg Ser Phe Arg Pro Leu Leu Phe Gln Ala Ser Glu His Val
        355                 360                 365
Ala Ser Ser Pro Ala Leu Gly Asp Val Ile Pro Phe Ser Ile Ile Ile
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Gln Phe Leu Phe Thr Arg Ala Pro Ala Glu Leu Lys Ser Pro Phe Gln
385                 390                 395                 400
Arg Ala Glu Trp Ser His Thr Arg Phe Ser Gln Trp Leu Asp Asp His
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Pro Ser Glu Lys Asp Arg Leu Leu Leu Ile Arg Gly Ala Leu Glu Ala
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Tyr Val Gln Ser Val Arg Ser Arg Glu Gly Lys Glu Phe Ala Pro Val
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<212> DNA
<213> Homo sapiens

<220>
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<222> (756)..(1454)

<400> 17228

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<212> PRT
<213> Homo sapiens

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Glu Ser Leu Leu Arg Gly Arg Phe Ala Pro Ser Gly His Ile Glu Gly
50 55 60

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Gly Tyr Ser Val Pro Lys Val Gly Thr Val Gln Val Thr Leu Phe Asn
        115                 120                 125
Pro Asn Gln Thr Val Val Lys Met Phe Leu Val Thr Phe Asp Phe Ser
    130                 135                 140
Asp Met Pro Ala Ala His Met Thr Phe Leu Arg His Arg Leu Phe Leu
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Val Pro Val Gly Glu Glu Gly Asn Ala Asn Pro Thr His Arg Leu Leu
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Cys Tyr Leu Leu His Leu Arg Phe Arg Ser Ser Arg Ser Gly Arg Leu
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<212> PRT
<213> Homo sapiens

<400> 17231

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			20					25					30		
Glu	Gly	Glu	Arg	Gln	Gly	Ser	Pro	Pro	Gly	Gly	Gly	Phe	Leu	Gly	Ser
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<213> Homo sapiens

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<210> 17235
<211> 726
<212> PRT
<213> Homo sapiens

0060460-070200

<400> 17235

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            20                  25                  30
Asn Phe Ser Gly Gly Lys Ile Thr Lys Asp Val Gly Tyr Pro Glu Phe
        35                  40                  45
Leu Asn Ile Arg Pro Tyr Met Ser Gln Asn Asn Gly Asp Pro Val Met
    50                  55                  60
Tyr Gly Leu Tyr Ala Val Leu Val His Ser Gly Tyr Ser Cys His Ala
65                  70                  75                  80
Gly His Tyr Tyr Cys Tyr Val Lys Ala Ser Asn Gly Gln Trp Tyr Gln
                85                  90                  95
Met Asn Asp Ser Leu Val His Ser Ser Asn Val Lys Val Val Leu Asn
            100                 105                 110
Gln Gln Ala Tyr Val Leu Phe Tyr Leu Arg Ile Pro Gly Ser Lys Lys
        115                 120                 125
Ser Pro Glu Gly Leu Ile Ser Arg Thr Gly Ser Ser Ser Leu Pro Gly
    130                 135                 140
Arg Pro Ser Val Ile Pro Asp His Ser Lys Lys Asn Ile Gly Asn Gly
145                 150                 155                 160
Ile Ile Ser Ser Pro Leu Thr Gly Lys Arg Gln Asp Ser Gly Thr Met
                165                 170                 175
Lys Lys Pro His Thr Thr Glu Glu Ile Gly Val Pro Ile Ser Arg Asn
            180                 185                 190
Gly Ser Thr Leu Gly Leu Lys Ser Gln Asn Gly Cys Ile Pro Pro Lys
        195                 200                 205
Leu Pro Ser Gly Ser Pro Ser Pro Lys Leu Ser Gln Thr Pro Thr His
    210                 215                 220
Met Pro Thr Ile Leu Asp Asp Pro Gly Lys Lys Val Lys Lys Pro Ala
225                 230                 235                 240
Pro Pro Gln His Phe Ser Pro Arg Thr Ala Gln Gly Leu Pro Gly Thr
                245                 250                 255
Ser Asn Ser Asn Ser Ser Arg Ser Gly Ser Gln Arg Gln Gly Ser Trp
            260                 265                 270
Asp Ser Arg Asp Val Val Leu Ser Thr Ser Pro Lys Leu Leu Ala Thr
        275                 280                 285
Ala Thr Ala Asn Gly His Gly Leu Lys Gly Asn Asp Glu Ser Ala Gly
    290                 295                 300
Leu Asp Arg Arg Gly Ser Ser Ser Ser Ser Pro Glu His Ser Ala Ser
305                 310                 315                 320
Ser Asp Ser Thr Lys Ala Pro Gln Thr Pro Arg Ser Gly Ala Ala His
                325                 330                 335
Leu Cys Asp Ser Gln Glu Thr Asn Cys Ser Thr Ala Gly His Ser Lys
            340                 345                 350
Thr Pro Pro Ser Gly Ala Asp Ser Lys Thr Val Lys Leu Lys Ser Pro
        355                 360                 365
Val Leu Ser Asn Thr Thr Thr Glu Pro Ala Ser Thr Met Ser Pro Pro
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Arg Ala Thr Gly Asn Asp Leu Arg Pro Pro Pro Pro Ser Pro Ser Ser
                405                 410                 415
Asp Leu Thr His Pro Met Lys Thr Ser His Pro Val Val Ala Ser Thr
            420                 425                 430
Trp Pro Val His Arg Ala Arg Ala Val Ser Pro Ala Pro Gln Ser Ser
        435                 440                 445
Ser Arg Leu Gln Pro Pro Phe Ser Pro His Pro Thr Ala Ala Ser Ala
    450                 455                 460
Leu Gln Glu Gly Gln Thr Gln Arg Gln Pro Gly Ser Pro Met Tyr Arg
465                 470                 475                 480
Arg Glu Gly Gln Ala Gln Leu Pro Ala Val Arg Arg Gln Glu Asp Gly
                485                 490                 495
Thr Gln Pro Gln Val Asn Gly Gln Gln Val Gly Cys Val Thr Asp Gly
            500                 505                 510
His His Ala Ser Ser Arg Lys Arg Arg Arg Lys Gly Ala Glu Gly Leu
        515                 520                 525
Gly Glu Glu Gly Gly Leu His Gln Asp Pro Leu Arg His Ser Cys Ser
    530                 535                 540
Pro Met Gly Asp Gly Asp Pro Glu Ala Met Glu Glu Ser Pro Arg Lys
545                 550                 555                 560
Lys Lys Lys Arg Lys Gln Glu Thr Gln Arg Ala Val Glu Glu Asp Gly
                565                 570                 575
His Leu Lys Cys Pro Arg Ser Ala Lys Pro Gln Asp Ala Val Val Pro
            580                 585                 590
Glu Ser Ser Ser Cys Ala Pro Ser Ala Asn Gly Trp Cys Pro Gly Asp
        595                 600                 605
Arg Met Gly Leu Ser Gln Ala Pro Pro Val Ser Trp Asn Gly Glu Arg
    610                 615                 620
Glu Ser Asp Val Val Gln Glu Leu Leu Lys Tyr Ser Ser Asp Lys Ala
625                 630                 635                 640
Tyr Gly Arg Lys Val Leu Thr Trp Asp Gly Lys Met Ser Ala Val Ser
                645                 650                 655
Gln Asp Ala Ile Glu Asp Ser Arg Gln Ala Arg Thr Glu Thr Val Val
            660                 665                 670
Asp Asp Trp Asp Glu Glu Phe Asp Arg Gly Lys Glu Lys Lys Ile Lys
        675                 680                 685
Lys Phe Lys Arg Glu Lys Arg Arg Asn Phe Asn Ala Phe Gln Lys Leu
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Gln Thr Arg Arg Asn Phe Trp Ser Val Thr His Pro Ala Lys Ala Ala
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Ser Leu Ser Tyr Arg Arg
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0609040.0002

<210> 17236

<211> 2348
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (142)..(1599)

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aagtctaatg ttaagaaaca catgcagacc cacaaggtgt ggcctccagg acacagtggt 180
ggcaccgtgt ctcgaaactc tgtgaccgta caggtcatgg ccctgaaccc cagcaggcag 240
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ttgtccacag ctggtgagga agagggggac aagccggagt ccaagcaggt ggtcctcatc 360
gacagctcct acctgtgcca attctgcccc agcaaattca gcacctactt ccagctcaag 420
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cagacgttcc caaagctcga cacatttctg gagcacatca agagccacca ggaggagctg 540
agctaccgct gccacctctg cggcaaggac ttcccctcgc tgtacgacct gggcgtgcac 600
cagtactccc acagcctcct gccacagcac agccccaaga aggacaatgc cgtctacaag 660
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0960504600-070800

tttgtcat 2348

<210> 17237
<211> 486
<212> PRT
<213> Homo sapiens

<400> 17237

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             20                  25                  30
Gln Glu Asp Glu Glu Ser Thr Gly Leu Gly Gln Pro Leu Pro Gly Ala
         35                  40                  45
Pro Gln Pro Gln Ala Leu Ser Thr Ala Gly Glu Glu Glu Gly Asp Lys
     50                  55                  60
Pro Glu Ser Lys Gln Val Val Leu Ile Asp Ser Ser Tyr Leu Cys Gln
 65                  70                  75                  80
Phe Cys Pro Ser Lys Phe Ser Thr Tyr Phe Gln Leu Lys Ser His Met
                 85                  90                  95
Thr Gln His Lys Asn Glu Gln Val Tyr Lys Cys Val Val Lys Ser Cys
            100                 105                 110
Ala Gln Thr Phe Pro Lys Leu Asp Thr Phe Leu Glu His Ile Lys Ser
        115                 120                 125
His Gln Glu Glu Leu Ser Tyr Arg Cys His Leu Cys Gly Lys Asp Phe
    130                 135                 140
Pro Ser Leu Tyr Asp Leu Gly Val His Gln Tyr Ser His Ser Leu Leu
145                 150                 155                 160
Pro Gln His Ser Pro Lys Lys Asp Asn Ala Val Tyr Lys Cys Val Lys
                165                 170                 175
Cys Val Asn Lys Tyr Ser Thr Pro Glu Ala Leu Glu His His Leu Gln
            180                 185                 190
Thr Ala Thr His Asn Phe Pro Cys Pro His Cys Gln Lys Val Phe Pro
        195                 200                 205
Cys Glu Arg Tyr Leu Arg Arg His Leu Pro Thr His Gly Ser Gly Gly
    210                 215                 220
Arg Phe Lys Cys Gln Val Cys Lys Lys Phe Phe Arg Arg Glu His Tyr
225                 230                 235                 240
Leu Lys Leu His Ala His Ile His Ser Gly Glu Lys Pro Tyr Lys Cys
                245                 250                 255
Ser Val Cys Glu Ser Ala Phe Asn Arg Lys Asp Lys Leu Lys Arg His
            260                 265                 270
Met Leu Ile His Glu Pro Phe Lys Lys Tyr Lys Cys Pro Phe Ser Thr
        275                 280                 285
His Thr Asp Cys Ser Lys Glu Phe Asn Arg Pro Asp Lys Leu Lys Ala
    290                 295                 300
His Ile Leu Ser His Ser Gly Met Lys Leu His Lys Cys Ala Leu Cys
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0606040.0203800

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305                 310                 315                 320
Ser Lys Ser Phe Ser Arg Arg Ala His Leu Ala Glu His Gln Arg Ala
                325                 330                 335
His Met Gly Asn Tyr Lys Phe Arg Cys Ala Gly Cys Ala Lys Gly Phe
            340                 345                 350
Ser Arg His Lys Tyr Leu Lys Asp His Arg Cys Arg Leu Gly Pro Gln
        355                 360                 365
Lys Asp Lys Asp Leu Gln Thr Arg Arg Pro Pro Gln Arg Arg Ala Ala
    370                 375                 380
Pro Arg Ser Cys Gly Ser Gly Gly Arg Lys Val Leu Thr Pro Leu Pro
385                 390                 395                 400
Asp Pro Leu Gly Leu Glu Glu Leu Lys Asp Thr Gly Ala Gly Leu Val
                405                 410                 415
Pro Glu Ala Val Pro Gly Lys Pro Pro Phe Ala Glu Pro Asp Ala Val
            420                 425                 430
Leu Ser Ile Val Val Gly Gly Ala Val Gly Ala Glu Thr Glu Leu Val
        435                 440                 445
Val Pro Gly His Ala Glu Gly Leu Gly Ser Asn Leu Ala Leu Ala Glu
    450                 455                 460
Leu Gln Ala Gly Ala Glu Gly Pro Cys Ala Met Leu Ala Val Pro Val
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<210> 17238
<211> 2574
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (23)..(2290)

<400> 17238
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cagtgatatg tattctttag gaactgttat gtatgctgta tttaataaag ggaaacctat 300
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acctttttgtt ttgcccaatg ttctacttat tgctgaggaa tgcaccaaag aagaatatgt 720
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09/05/2008 09:50:36

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<210> 17239
<211> 756
<212> PRT
<213> Homo sapiens

<400> 17239

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			20					25				30			
Pro	Ser	Glu	Gln	Glu	Pro	Lys	Phe	Pro	Cys	Lys	Glu	Trp	Asp	Pro	Asn
		35					40				45				
Leu	Pro	Ser	Leu	Cys	Leu	Pro	Asn	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Tyr
	50					55				60					
Ile	Leu	Ser	Val	Ser	Cys	Glu	Thr	Ala	Ser	Asp	Met	Tyr	Ser	Leu	Gly
65					70					75					80

Thr Val Met Tyr Ala Val Phe Asn Lys Gly Lys Pro Ile Phe Glu Val
85 90 95
Asn Lys Gln Asp Ile Tyr Lys Ser Phe Ser Arg Gln Leu Asp Gln Leu
100 105 110
Ser Arg Leu Gly Ser Ser Ser Leu Thr Asn Ile Pro Glu Glu Val Arg
115 120 125
Glu His Val Lys Leu Leu Leu Asn Val Thr Pro Thr Val Arg Pro Asp
130 135 140
Ala Asp Gln Met Thr Lys Ile Pro Phe Phe Asp Asp Val Gly Ala Val
145 150 155 160
Thr Leu Gln Tyr Phe Asp Thr Leu Phe Gln Arg Asp Asn Leu Gln Lys
165 170 175
Ser Gln Phe Phe Lys Gly Leu Leu Lys Val Leu Pro Lys Leu Pro Lys
180 185 190
Arg Val Ile Val Gln Arg Ile Leu Pro Cys Leu Thr Ser Glu Phe Val
195 200 205
Asn Pro Asp Met Val Pro Phe Val Leu Pro Asn Val Leu Leu Ile Ala
210 215 220
Glu Glu Cys Thr Lys Glu Glu Tyr Val Lys Leu Ile Leu Pro Glu Leu
225 230 235 240
Gly Pro Val Phe Lys Gln Gln Glu Pro Ile Gln Ile Leu Leu Ile Phe
245 250 255
Leu Gln Lys Met Asp Leu Leu Leu Thr Lys Thr Pro Pro Asp Glu Ile
260 265 270
Lys Asn Ser Val Leu Pro Met Val Tyr Arg Ala Leu Glu Ala Pro Ser
275 280 285
Ile Gln Ile Gln Glu Leu Cys Leu Asn Ile Ile Pro Thr Phe Ala Asn
290 295 300
Leu Ile Asp Tyr Pro Ser Met Lys Asn Ala Leu Ile Pro Arg Ile Lys
305 310 315 320
Asn Ala Cys Leu Gln Thr Ser Ser Leu Ala Val Arg Val Asn Ser Leu
325 330 335
Val Cys Leu Gly Lys Ile Leu Glu Tyr Leu Asp Lys Trp Phe Val Leu
340 345 350
Asp Asp Ile Leu Pro Phe Leu Gln Gln Ile Pro Ser Lys Glu Pro Ala
355 360 365
Val Leu Met Gly Ile Leu Gly Ile Tyr Lys Cys Thr Phe Thr His Lys
370 375 380
Lys Leu Gly Ile Thr Lys Glu Gln Leu Ala Gly Lys Val Leu Pro His
385 390 395 400
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405 410 415
Ser Phe Ile Ser Val Ile Lys Glu Met Leu Asn Arg Leu Glu Ser Glu
420 425 430
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435 440 445
Ser Leu Asp Ile Gly Asn Gln Met Asn Val Ser Glu Glu Met Lys Val
450 455 460

0050450-0050800

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Gln Asn Lys His Lys Arg Ala Ser Leu Thr Leu Glu Glu Lys Gln Lys
            500                 505                 510
Leu Ala Lys Glu Gln Glu Gln Ala Gln Lys Leu Lys Ser Gln Gln Pro
        515                 520                 525
Leu Lys Pro Gln Val His Thr Pro Val Ala Thr Val Lys Gln Thr Lys
    530                 535                 540
Asp Leu Thr Asp Thr Leu Met Asp Asn Met Ser Ser Leu Thr Ser Leu
545                 550                 555                 560
Ser Val Ser Thr Pro Lys Ser Ser Ala Ser Ser Thr Phe Thr Ser Val
                565                 570                 575
Pro Ser Met Gly Ile Gly Met Met Phe Ser Thr Pro Thr Asp Asn Thr
            580                 585                 590
Lys Arg Asn Leu Thr Asn Gly Leu Asn Ala Asn Met Gly Phe Gln Thr
        595                 600                 605
Ser Gly Phe Asn Met Pro Val Asn Thr Asn Gln Asn Phe Tyr Ser Ser
    610                 615                 620
Pro Ser Thr Val Gly Val Thr Lys Met Thr Leu Gly Thr Pro Pro Thr
625                 630                 635                 640
Leu Pro Asn Phe Asn Ala Leu Ser Val Pro Pro Ala Gly Ala Lys Gln
                645                 650                 655
Thr Gln Gln Arg Pro Thr Asp Met Ser Ala Leu Asn Asn Leu Phe Gly
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Pro Gln Lys Pro Lys Val Ser Met Asn Gln Leu Ser Gln Gln Lys Pro
        675                 680                 685
Asn Gln Trp Leu Asn Gln Phe Val Pro Pro Gln Gly Ser Pro Thr Met
    690                 695                 700
Gly Ser Ser Val Met Gly Thr Gln Met Asn Val Ile Gly Gln Ser Ala
705                 710                 715                 720
Phe Gly Met Gln Gly Asn Pro Phe Phe Asn Pro Gln Asn Phe Ala Gln
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<211> 2828
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (115)..(990)

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Thr Gly Asp Arg Glu Gly Arg Lys Arg Gly Gln Leu Pro Pro Asp His
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<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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35 40 45
Trp His Phe Arg Tyr Gln Glu Ala Ser Arg Pro Arg Glu Ala Leu Leu
50 55 60
Gln Leu Gln Lys Leu Cys Cys Gln Trp Leu Arg Pro Glu Lys Cys Thr
65 70 75 80
Lys Glu Gln Ile Leu Glu Leu Leu Val Leu Glu Gln Phe Pro Thr Val
85 90 95
Leu Leu Gln Glu Ile Gln Ile Trp Val Arg Gln Gln His Pro Glu Ser
100 105 110
Gly Glu Glu Ala Val Ala Leu Val Glu Asp Leu Gln Lys Glu Pro Gly
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<212> DNA
<213> Homo sapiens

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<212> PRT
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<400> 17245
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50 55 60
Gly Glu Ile Asp Leu Met Ser Leu Lys Arg Met Met Glu Lys Leu Gly
65 70 75 80
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85 90 95
Gly Gly Val Ser Asp Thr Ile Ser Tyr Arg Asp Phe Val Asn Met Met
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<213> Homo sapiens

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<222> (38)..(2284)

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<212> PRT
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<400> 17247
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Val Ser Asp Lys Ala His Ile Leu Ser Met Gln Lys Phe Gly Leu Arg
 65                  70                  75                  80
Asp Thr Ile Val Lys Ser His Leu Leu Gln Lys Glu Glu Asp Tyr Thr
                 85                  90                  95
Tyr Ile Gln Asn Phe Arg Phe Phe Ala Gly Thr Tyr Asn Val Asn Gly
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Ala Val Ser Glu Gly Leu His Pro Asp Ala Lys Tyr Ala Lys Val Lys
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0960-0960-0960

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Val Val His Ser Phe Asp Tyr Ala Ala Ser Ile Leu Ser Leu Ala Leu
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Ala His Glu Asp Glu Thr Ile Val Val Gly Met Thr Asn Gly Ile Leu
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Ser Val Lys His Arg Lys Ser Glu Ala Lys Lys Glu Ser Leu Pro Arg
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Arg Arg Arg Pro Ala Tyr Arg Thr Phe Ile Lys Gly Lys Asn Tyr Met
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Lys Gln Arg Asp Asp Ile Leu Ile Asn Arg Pro Ala Lys Lys His Leu

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Val Ser Ile Ile Lys Glu Leu Asn Arg Arg Gly Val Leu Ala Asn Ala
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Leu Ala Gly Arg Asp Glu Lys Glu Ile Ser His Val Leu Asn Phe Leu
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Ile Arg Asn Leu Ser Gln Pro Arg Phe Ala Pro Val Leu Ile Asn Ala
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Ala Glu Ile Ile Ile Asp Ile Tyr Leu Pro Val Ile Gly Gln Ser Pro
    210                 215                 220
Val Val Asp Lys Lys Phe Leu Leu Leu Gln Gly Leu Val Glu Lys Glu
225                 230                 235                 240
Ile Asp Tyr Gln Arg Glu Leu Leu Glu Thr Leu Gly Met Met Asp Met
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Asp Glu Ser Pro Pro Ser Ser Pro Gly Asn Pro Val Gln Gly Gln Cys
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<212> DNA
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<213> Homo sapiens

<400> 17266

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Glu Cys Tyr Val Pro Val Ile Thr Glu Glu Val Gly Ser Ser Leu Glu
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Pro Gln Leu Ala Gly Asp Gly Asp Ser Glu Gln Gln Leu Val Glu Ala
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<212> DNA
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<212> PRT
<213> Homo sapiens

<400> 17269

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225                 230                 235                 240
Phe Leu Lys Ala Gln Val Leu Pro Pro Leu Arg Asp Val Arg Thr Arg
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Pro Glu Val Gly Glu Met Leu Arg Asn Lys Leu Val Arg Leu Met Thr
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<222> (617)..(919)

<400> 17270

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<211> 543
<212> PRT

<213> Homo sapiens

<400> 17273

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Arg Asn Ala Glu Ser His Val Val Pro Glu Asp Pro Arg Phe Leu Ser
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Glu Ser Ser Ser Gly Pro Ala Pro His Gly Glu Pro Ala Arg Arg Ala
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Ser His Asn Glu Leu Pro His Thr Glu Leu Ser Ser Gln Thr Pro Tyr
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Thr Leu Asn Phe Ser Phe Glu Glu Leu Asn Thr Leu Gly Leu Asp Glu
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Thr Pro Ser Leu Ser Ser Leu Asn Ser Gln Asp Ser Ser Ile Glu Ile
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Ser Lys Leu Thr Asp Lys Val Gln Ala Glu Tyr Arg Asp Ala Tyr Arg
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Glu Tyr Ile Ala Gln Met Ser Gln Leu Glu Gly Gly Pro Gly Ser Thr
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Thr Ile Ser Gly Arg Ser Ser Pro His Ser Thr Tyr Tyr Met Gly Gln
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Ser Ser Ser Gly Gly Ser Ile His Ser Asn Leu Glu Gln Glu Lys Gly
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Lys Asp Ser Glu Pro Lys Pro Asp Asp Gly Arg Lys Ser Phe Leu Met
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Asp Ala Ser Pro Leu Asp Pro Ile Thr Glu Glu Asp Glu Lys Ser Asp
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Gln Ser Gly Ser Lys Leu Leu Pro Gly Lys Lys Ser Ser Glu Arg Ser
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Ser Leu Phe Gln Thr Asp Leu Lys Leu Lys Gly Ser Gly Leu Arg Tyr
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Gln Lys Leu Pro Ser Asp Glu Asp Glu Ser Gly Thr Glu Glu Ser Asp
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305                 310                 315                 320
Val Glu Arg Val Pro Lys Ser Pro Glu His Ser Ala Glu Pro Ile Arg
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Thr Phe Ile Lys Ala Lys Glu Tyr Leu Ser Asp Ala Leu Leu Asp Lys
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Lys Asp Ser Ser Asp Ser Gly Val Arg Ser Ser Glu Ser Ser Pro Asn
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385                 390                 395                 400
Pro His Ser Leu Ser Gly Leu Gln Asp Pro Ile Ile Ala Arg Met Ser
                405                 410                 415
Ile Cys Ser Glu Asp Lys Lys Ser Pro Ser Glu Cys Ser Leu Ile Ala
            420                 425                 430
Ser Ser Pro Glu Glu Asn Trp Pro Ala Cys Gln Lys Ala Tyr Asn Leu
        435                 440                 445
Asn Arg Thr Pro Ser Thr Val Thr Leu Asn Asn Asn Ser Ala Pro Ala
    450                 455                 460
Asn Arg Ala Asn Gln Asn Phe Asp Glu Met Glu Gly Ile Arg Glu Thr
465                 470                 475                 480
Ser Gln Val Ile Leu Arg Pro Ser Ser Ser Pro Asn Pro Thr Thr Ile
                485                 490                 495
Gln Asn Glu Asn Leu Lys Ser Met Thr His Lys Arg Ser Gln Arg Ser
            500                 505                 510
Ser Tyr Thr Arg Leu Ser Lys Asp Pro Pro Glu Leu His Ala Ala Ala
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<211> 2267
<212> DNA
<213> Homo sapiens

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tggaaagagg aaagagaaaa tcactctttt gtgtttctta aacatgccaa tcaagcaaga 180
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gtaagtgcgg tagtttaatt tcctagaaaa agttgctagt gccttgttta agatgatcat 480
gttatcattt catgtggata ttattggtct aattagaagg agaagattga ttggatttac 540
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cacatcatct tcagatatga tttttgccct cactggggat gtagaaccag aataggtaca 660
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atttttacat gttccaaaaa aaatcatagt gattgttctg taataagaat gttaacgtga 780
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<210> 17275
<211> 2225
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (465)..(2207)

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<212> PRT
<213> Homo sapiens

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35 40 45
Asn His Leu Gln Met His Ser Gln Lys Gln Arg Cys Leu Lys Arg Val
50 55 60
Glu Gln Cys His Lys His Asn Ala Phe Gly Asn Ile Ile His Gln Arg
65 70 75 80
Lys Ser Asp Phe Pro Leu Arg Gln Asn His Asp Thr Phe Asp Leu His
85 90 95
Gly Lys Ile Leu Lys Ser Asn Leu Ser Leu Val Asn Gln Asn Lys Arg
100 105 110
Tyr Glu Ile Lys Asn Ser Val Gly Val Asn Gly Asp Gly Lys Ser Phe
115 120 125
Leu His Ala Lys His Glu Gln Phe His Asn Glu Met Asn Phe Pro Glu

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Thr Gln Asn Ile Asp Lys Pro His Val Cys Thr Glu Cys Gly Lys Ala
                165                 170                 175
Phe Leu Lys Lys Ser Arg Leu Ile Tyr His Gln Arg Val His Thr Gly
            180                 185                 190
Glu Lys Pro His Gly Cys Ser Ile Cys Gly Lys Ala Phe Ser Arg Lys
        195                 200                 205
Ser Gly Leu Thr Glu His Gln Arg Asn His Thr Gly Glu Lys Pro Tyr
    210                 215                 220
Glu Cys Thr Glu Cys Asp Lys Ala Phe Arg Trp Lys Ser Gln Leu Asn
225                 230                 235                 240
Ala His Gln Lys Ile His Thr Gly Glu Lys Ser Tyr Ile Cys Ser Asp
                245                 250                 255
Cys Gly Lys Gly Phe Ile Lys Lys Ser Arg Leu Ile Asn His Gln Arg
            260                 265                 270
Val His Thr Gly Glu Lys Pro His Gly Cys Ser Leu Cys Gly Lys Ala
        275                 280                 285
Phe Ser Lys Arg Ser Arg Leu Thr Glu His Gln Arg Thr His Thr Gly
    290                 295                 300
Glu Lys Pro Tyr Glu Cys Thr Glu Cys Asp Lys Ala Phe Arg Trp Lys
305                 310                 315                 320
Ser Gln Leu Asn Ala His Gln Lys Ala His Thr Gly Glu Lys Ser Tyr
                325                 330                 335
Ile Cys Arg Asp Cys Gly Lys Gly Phe Ile Gln Lys Gly Asn Leu Ile
            340                 345                 350
Val His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ile Cys Asn Glu
        355                 360                 365
Cys Gly Lys Gly Phe Ile Gln Lys Gly Asn Leu Leu Ile His Arg Arg
    370                 375                 380
Thr His Thr Gly Glu Lys Pro Tyr Val Cys Asn Glu Cys Gly Lys Gly
385                 390                 395                 400
Phe Ser Gln Lys Thr Cys Leu Ile Ser His Gln Arg Phe His Thr Gly
                405                 410                 415
Lys Thr Pro Phe Val Cys Thr Glu Cys Gly Lys Ser Cys Ser His Lys
            420                 425                 430
Ser Gly Leu Ile Asn His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
        435                 440                 445
Thr Cys Ser Asp Cys Gly Lys Ala Phe Arg Asp Lys Ser Cys Leu Asn
    450                 455                 460
Arg His Arg Arg Thr His Thr Gly Glu Arg Pro Tyr Gly Cys Ser Asp
465                 470                 475                 480
Cys Gly Lys Ala Phe Ser His Leu Ser Cys Leu Val Tyr His Lys Gly
                485                 490                 495
Met Leu His Ala Arg Glu Lys Cys Val Gly Ser Val Lys Leu Glu Asn
            500                 505                 510
Pro Cys Ser Glu Ser His Ser Leu Ser His Thr Arg Asp Leu Ile Gln
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Ala Gln Thr Ser Leu Thr Asn Ser Ala Phe Gln Ala Glu Ser Lys Val
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<213> Homo sapiens

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<211> 254
<212> PRT
<213> Homo sapiens

<400> 17278

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Lys	Ser	Thr	Ser	Ser	Ala	Met	Ser	Gly	Ser	His	Gln	Asp	Leu	Ser	Val
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Ile	Gln	Pro	Ile	Val	Lys	Asp	Cys	Lys	Glu	Ala	Asp	Leu	Ser	Leu	Tyr
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Cys Asn Phe Phe Thr Tyr Ile Arg Tyr Ile Gln Gln Gly Leu Val Lys
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Gln Gln Asp Val Asp Gln Met Phe Trp Glu Val Met Gln Leu Arg Lys
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<400> 17279

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35 40 45
Arg Ser Gly Thr Pro Asp Leu Gln Glu Val Gly Ser Glu Ala Gly Arg
50 55 60
Pro Ala Arg Leu Arg Gly Gly Phe Leu Pro Gly Val Glu Leu Pro Thr
65 70 75 80
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<212> PRT
<213> Homo sapiens

<400> 17282

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Lys Cys Ser Ile Leu Ser Asn Glu Arg Gly Ser Gln Ala Tyr Glu Asp
     50                  55                  60
Phe Val Ala Gly Leu Gly Trp Glu Val Asp Leu Ser Thr His Cys Gly
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Phe Met Gly Gly Leu Gln Arg Asn Gly Ser Thr Gly Gln Thr Ala Pro
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Tyr Tyr Ala Thr Ser Thr Val Glu Val Ile Phe His Val Ser Thr Arg
            100                 105                 110
Met Pro Ser Asp Ser Asp Asp Ser Leu Thr Lys Lys Leu Arg His Leu
        115                 120                 125
Gly Asn Asp Glu Val His Ile Val Trp Ser Glu His Ser Arg Asp Tyr
    130                 135                 140
Arg Arg Gly Ile Ile Pro Thr Ala Phe Gly Asp Val Ser Ile Ile Ile
145                 150                 155                 160
Tyr Pro Met Lys Asn His Met Phe Phe Ile Ala Ile Thr Lys Lys Pro
                165                 170                 175
Glu Val Pro Phe Phe Gly Pro Leu Phe Asp Gly Ala Ile Val Ser Gly
            180                 185                 190
Lys Leu Leu Pro Ser Leu Val Cys Ala Thr Cys Ile Asn Ala Ser Arg
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<212> PRT
<213> Homo sapiens

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Phe Lys Glu Lys Arg Lys Ser Leu Ser Arg Met Gln Arg Lys Trp Lys
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Lys Ala Glu Glu Lys Leu Ala Arg Glu Leu Arg Glu Ala Glu Ala Ser
            100                 105                 110
Glu Ser Thr Glu Lys Lys Leu Lys Leu His Thr Glu Thr Leu Asn Ile
        115                 120                 125
Val Phe Val Thr Tyr Phe Arg Ile Leu Lys Lys Ala Gln Arg Ser Pro
    130                 135                 140
Leu Leu Pro Ala Val Leu Glu Gly Leu Ala Lys Phe Ala His Leu Ile
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Asn Val Glu Phe Phe Asp Asp Leu Leu Val Val Leu His Thr Leu Ile
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Glu Ser Gly Asp Leu Ser Tyr Gln Glu Ser Leu His Cys Val Gln Thr
            180                 185                 190
Ala Phe His Ile Leu Ser Gly Gln Gly Asp Val Leu Asn Ile Asp Pro
        195                 200                 205
Leu Lys Phe Tyr Thr His Leu Tyr Lys Thr Leu Phe Lys Leu His Ala
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Gly Ala Thr Asn Glu Gly Val Glu Ile Val Leu Gln Cys Leu Asp Val
225                 230                 235                 240
Met Leu Thr Lys Arg Arg Lys Gln Val Ser Gln Gln Arg Ala Leu Ala
                245                 250                 255
Phe Ile Lys Arg Leu Cys Thr Leu Ala Leu His Val Leu Pro Asn Ser
            260                 265                 270
Ser Ile Gly Ile Leu Ala Thr Thr Arg Ile Leu Met His Thr Phe Pro
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Lys Thr Asp Leu Leu Leu Asp Ser Glu Ser Gln Gly Ser Gly Val Phe
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305                 310                 315                 320
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Arg Phe Ala Ala His Leu Ile Ala Gly Ala Pro Ser Glu Gly Ser Gly
            340                 345                 350
Ala Leu Lys Pro Glu Leu Ser Arg Arg Ser Ala Thr Glu Leu Phe Glu
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Ala Tyr Ser Met Ala Glu Met Thr Phe Asn Pro Pro Val Glu Ser Ser
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<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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35 40 45
Gln Leu Cys His Arg Val Ser Phe Ala Ile Ala Pro Asn Gln Gln Val
50 55 60
Lys Thr Phe Leu Leu Pro Cys Phe Leu Ile Phe Cys Ser Glu Pro Phe
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Glu Thr Ser Ser Ser
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<210> 17287
<211> 2489
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (188)..(1411)

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Gly	Val	Cys	Ala	Gly	Arg	Ala	Ala	Ser	Trp	Ala	Ser	Ala	Arg	Ser	Met
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His Leu Met Glu Tyr Ile Thr Lys Gln Gly Phe Thr Ile Arg Asn Thr
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<400> 17299

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Pro Leu Asp Phe Asp Val Ser Ser Pro Leu Thr Tyr Gly Thr Pro Ser
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50 55 60
Ile Ser Lys Arg Phe Lys Ser His Thr Asp Gln Leu Val Leu Ile Phe
65 70 75 80
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Pro Phe Val Gln Ser Met Leu Ser Asn Pro Asp Leu Met Arg Gln Leu
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Pro Asn Pro Trp Ala Pro Gln Thr Ser Gln Ser Ser Ser Ala Ser Ser
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35 40 45
Phe His His Leu Thr Pro Leu Lys Thr Lys His Ile Ala His Trp Cys
50 55 60
Arg Cys His Gly Tyr Thr Pro Pro Asp Pro Glu Ser Leu Arg Asn Asp
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Gly Asp Ser Ile Glu Asp Val Leu Thr Gln Ile Asp Ser Glu Pro Glu
85 90 95
Cys Pro Ser Ser Phe Ser Ser Ala Asp Asn Leu Cys Arg Lys Leu Glu

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Gly Ser Glu Phe Ile Gly Asp Val Thr Gln Lys Ile Gly Ile Thr Leu
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Gln Pro Val Ala Leu His Arg Asn Val Tyr Ala Ser Val Val Glu Asp
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Met Ile Leu Lys Ala Thr Glu Gln Leu Val Asn Asp Ile Leu Arg Gln
        195                 200                 205
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Glu Ile Thr Val Ser Asn Ile His Gln Ala Ile Cys Asn Ile Pro Phe
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Pro Thr Ser Ile Lys Cys Leu Thr Pro His Leu Lys Asp Gly Val Pro
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Glu Glu His Glu Ile Leu Thr Lys Ser Tyr Met Glu Leu Leu Gln Arg
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Ala Ser Ser Leu Glu Val Gln Lys Ala Gln Leu Glu Gly Arg Leu Glu
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Glu Lys Glu Ser Leu Val Lys Leu Gln Gln Glu Glu Leu Asn Lys His
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Phe Ser Tyr Gln Leu Glu Ala Leu Lys Ser Lys Tyr Val Leu Leu Asn
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Cys Lys Lys Lys Val Pro Ala Ser Lys Arg Phe Thr Ile His Arg Thr
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<400> 17317

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Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser Ser
            340                 345                 350
Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser Thr
        355                 360                 365
Gly Phe Gln Ile Pro Ser Gln Glu Leu Ala Ser Gln Ile Asp Pro Gln
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Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala Gln
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Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr Phe
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<213> Homo sapiens

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Thr Asn Leu Ser Glu Glu Leu Gly Val Arg Val His Val Asn Lys Leu
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Asp Met Phe Arg Asn Met Pro Glu Ile Leu His His Leu Thr Thr Asp
        115                 120                 125
Arg Asn Thr Gln Ile His Ala Cys Arg His Pro Lys Ala Glu Glu Tyr
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Phe Gln Trp Ser Lys Leu Pro Cys Gly Ile Thr Ser Arg Asn Arg Ile
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Pro Leu His Ile Ile Ser Ile Lys Pro Ser Thr Met Trp Phe Gly Glu
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Arg Ser Arg Lys Thr Asn Val Ile Val Arg Thr Gly Glu Ser Ser Tyr
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Arg Ala Arg Phe Ser Phe His Ser Ser Tyr Ser Glu Ile Lys Asp Phe
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Leu Ser Tyr Leu Cys Pro Val Asn Ala Tyr Pro Asn Val Ile Pro Val
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Gly Thr Thr Met Asp Lys Val Val Glu Ile Leu Lys Pro Leu Cys Arg
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<211> 262
<212> PRT
<213> Homo sapiens

<400> 17321
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Val Arg Trp Met Leu Gln Asp Ile Gln Glu Val Leu Asn Arg Ser Lys
35 40 45
Ser Trp Ser Leu Gln Gln Pro Glu Pro Ile Ser Leu Glu Leu Lys Thr
50 55 60
Asp Cys Arg Val Leu Gly Leu Arg Glu Ile Leu Lys Thr Tyr Ala Ala
65 70 75 80
Asp Val Arg Leu Asp Pro Asp Thr Ala Tyr Pro Arg Leu Ile Val Ser
85 90 95
Glu Asp Arg Lys Arg Val His Tyr Gly Asp Thr Asn Gln Lys Leu Pro
100 105 110
Asp Asn Pro Glu Arg Phe Tyr Arg Tyr Asn Ile Val Leu Gly Ser Gln

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Cys Ile Ser Ser Gly Arg His Tyr Trp Glu Val Glu Val Gly Asp Arg
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Ser Glu Trp Gly Leu Gly Val Cys Lys Gln Asn Val Asp Arg Lys Glu
145                 150                 155                 160
Val Val Tyr Leu Ser Pro His Tyr Gly Phe Trp Val Ile Arg Leu Arg
                165                 170                 175
Lys Gly Asn Glu Tyr Arg Ala Gly Thr Asp Glu Tyr Pro Ile Leu Ser
            180                 185                 190
Leu Pro Val Pro Pro Arg Arg Val Gly Ile Phe Val Asp Tyr Glu Ala
        195                 200                 205
His Asp Ile Ser Phe Tyr Asn Val Thr Asp Cys Gly Ser His Ile Phe
    210                 215                 220
Thr Phe Pro Arg Tyr Pro Phe Pro Gly Arg Leu Leu Pro Tyr Phe Ser
225                 230                 235                 240
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<220>
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<222> (73)..(1551)

<400> 17322

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0962946.0720800

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<210> 17323
<211> 493
<212> PRT
<213> Homo sapiens

<400> 17323
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35 40 45
Asp Asp Asp Asp Asp Leu Glu Arg Val Ser Trp Ser Gly Glu Pro Val
50 55 60
Gly Ser Ile Ser Trp Ser Ile Arg Glu Thr Ala Gly Asn Ser Gly Ser
65 70 75 80
Thr His Glu Gly Arg Glu Gln Leu Lys Ser Arg Asn Ser Phe Ser Ser
85 90 95
Tyr Ala Gln Leu Pro Lys Pro Thr Ser Thr Tyr Ser Leu Ser Ser Phe
100 105 110
Phe Arg Gly Arg Thr Arg Pro Gly Ser Phe Gln Ser Leu Ser Asp Ala

0056469-0056800

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          115                 120                 125
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      130                 135                 140
Lys Gly Glu Tyr Arg Asp Tyr Ser Asn Asp Trp Ser Pro Ser Asp Thr
145                 150                 155                 160
Val Arg Arg Leu Arg Lys Gly Lys Val Cys Ser Leu Glu Arg Phe Arg
                165                 170                 175
Ser Leu Gln Asp Lys Leu Gln Leu Leu Glu Glu Ala Val Ser Met His
            180                 185                 190
Asp Gly Asn Val Ile Thr Ala Val Leu Ile Phe Leu Lys Arg Thr Leu
        195                 200                 205
Ser Lys Glu Ile Leu Phe Arg Glu Leu Glu Val Arg Gln Val Ala Leu
    210                 215                 220
Arg His Leu Ile His Phe Leu Lys Glu Ile Gly Asp Gln Lys Leu Leu
225                 230                 235                 240
Leu Asp Leu Phe Arg Phe Leu Asp Arg Thr Glu Glu Leu Ala Leu Ser
                245                 250                 255
His Tyr Arg Glu His Leu Asn Ile Gln Asp Pro Asp Lys Arg Lys Glu
            260                 265                 270
Phe Leu Lys Thr Cys Val Gly Leu Pro Phe Ser Ala Glu Asp Ser Ala
        275                 280                 285
His Ile Gln Asp His Tyr Thr Leu Leu Glu Arg Gln Ile Ile Ile Glu
    290                 295                 300
Ala Asn Asp Arg His Leu Glu Ser Ala Gly Gln Thr Glu Ile Phe Arg
305                 310                 315                 320
Lys His Pro Arg Lys Ala Ser Ile Leu Asn Met Pro Leu Val Thr Thr
                325                 330                 335
Leu Phe Tyr Ser Cys Phe Tyr His Tyr Thr Glu Ala Glu Gly Thr Phe
            340                 345                 350
Ser Ser Pro Val Asn Leu Lys Lys Thr Phe Lys Ile Pro Asp Lys Gln
        355                 360                 365
Tyr Val Leu Thr Ala Leu Ala Ala Arg Ala Lys Leu Arg Ala Trp Asn
    370                 375                 380
Asp Val Asp Ala Leu Phe Thr Thr Lys Asn Trp Leu Gly Tyr Thr Lys
385                 390                 395                 400
Lys Arg Ala Pro Ile Gly Phe His Arg Val Val Glu Ile Leu His Lys
                405                 410                 415
Asn Asn Ala Pro Val Gln Ile Leu Gln Glu Tyr Val Asn Leu Val Glu
            420                 425                 430
Asp Val Asp Thr Lys Leu Asn Leu Ala Thr Lys Phe Lys Cys His Asp
        435                 440                 445
Val Val Ile Asp Thr Tyr Arg Asp Leu Lys Asp Arg Gln Gln Leu Leu
    450                 455                 460
Ala Tyr Arg Ser Lys Val Asp Lys Gly Ser Ala Glu Glu Glu Lys Ile
465                 470                 475                 480
Asp Ala Leu Leu Ser Ser Ser Gln Ile Arg Trp Lys Asn
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0062940-0062950

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<212> DNA
<213> Homo sapiens

<220>
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<222> (41)..(1342)

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<210> 17325
<211> 434
<212> PRT
<213> Homo sapiens

<400> 17325

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Ile Leu Ala Arg Gly Gly Ser Lys Gly Ile Pro Leu Lys Asn Ile Lys
    50                  55                  60
His Leu Ala Gly Val Pro Leu Ile Gly Trp Val Leu Arg Ala Ala Leu
65                  70                  75                  80
Asp Ser Gly Ala Phe Gln Ser Val Trp Val Ser Thr Asp His Asp Glu
                85                  90                  95
Ile Glu Asn Val Ala Lys Gln Phe Gly Ala Gln Val His Arg Arg Ser
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Ser Glu Val Ser Lys Asp Ser Ser Thr Ser Leu Asp Ala Ile Ile Glu
        115                 120                 125
Phe Leu Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala
    130                 135                 140
Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met
145                 150                 155                 160
Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His
                165                 170                 175
Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu
            180                 185                 190
Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp
        195                 200                 205
Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu
    210                 215                 220
Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met
225                 230                 235                 240
Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile
                245                 250                 255
Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu
            260                 265                 270
Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn
        275                 280                 285
Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp
    290                 295                 300
Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu
305                 310                 315                 320
Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser
                325                 330                 335
Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala
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Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val
        355                 360                 365
Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val
    370                 375                 380
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0962946.0928

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385 390 395 400
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu
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420 425 430
Gln Lys

<210> 17326
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (100)..(564)

<400> 17326
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<212> PRT
<213> Homo sapiens

<400> 17327

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Leu	Ala	Ser	His	Pro	Thr	Ala	Glu	Val	Thr	Ile	Val	Gln	Val	Asp	Val
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Ser	Asn	Leu	Gln	Ser	Val	Phe	Arg	Ala	Ser	Lys	Glu	Leu	Lys	Gln	Arg
65					70					75					80
Phe	Gln	Arg	Leu	Asp	Cys	Ile	Tyr	Leu	Asn	Ala	Gly	Ile	Met	Pro	Asn
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Pro	Gln	Leu	Asn	Ile	Lys	Ala	Leu	Phe	Phe	Gly	Leu	Phe	Ser	Arg	Lys
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Val	Ile	His	Met	Phe	Ser	Thr	Ala	Glu	Gly	Leu	Leu	Thr	Gln	Gly	Asp
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Lys	Ile	Thr	Ala	Asp	Gly	Leu	Gln	Glu	Val	Phe	Glu	Thr	Asn	Val	Phe
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<210> 17328
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<212> DNA

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<213> Homo sapiens

<220>
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<222> (1057)..(1464)

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Glu His Glu Ala Pro Ser Ser Glu Cys Met Phe Ser Asp Phe Leu Thr
50 55 60
Lys Leu Asn Ile Val Ser Ile Gly Lys Gly Lys Ile Phe Glu Gly Tyr
65 70 75 80
Arg Ser Met Phe Met Glu Pro Ala Lys Arg Met Lys Lys Ser Leu Asp
85 90 95
Thr Thr Asp Asn Trp His Ile Arg Pro Glu Pro Phe Ser Leu Ser Ile
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Cys Pro Ser Phe Leu Val Thr Ala
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<212> PRT

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<213> Homo sapiens

<400> 17331

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Thr Glu Gln Leu Met Thr Thr Lys Leu Ile Ser Glu Leu Gln Lys Leu
    50                  55                  60
Phe Met Ser Lys Asn Glu Thr Tyr Val Leu Lys Leu Trp Pro Leu Phe
65                  70                  75                  80
Val Lys Leu Leu Gly Arg Thr Leu His Arg Ser Gly Ser Phe Ile Asn
                85                  90                  95
Ser Leu Leu Gln Leu Glu Glu Leu Gly Phe Arg Ser Gly Ala Pro Met
            100                 105                 110
Ile Lys Lys Ile Ala Phe Ile Ala Trp Lys Ser Leu Ile Asp Asn Phe
        115                 120                 125
Ala Leu Asn Pro Asp Ile Leu Cys Ser Ala Lys Arg Leu Lys Leu Leu
    130                 135                 140
Met Gln Pro Leu Ser Ser Ile His Val Arg Thr Glu Thr Leu Ala Leu
145                 150                 155                 160
Thr Lys Leu Glu Val Trp Trp Tyr Leu Leu Met Arg Leu Gly Pro His
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Leu Pro Ala Asn Phe Glu Gln Val Cys Val Pro Leu Ile Gln Ser Thr
            180                 185                 190
Ile Ser Ile Asp Ser Asn Ala Ser Pro Gln Gly Asn Ser Cys His Val
        195                 200                 205
Ala Thr Ser Pro Gly Leu Asn Pro Met Thr Pro Val His Lys Gly Ala
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Ser Ser Pro Tyr Gly Ala Pro Gly Thr Pro Arg Met Asn Leu Ser Ser
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Val Asp Arg Ile Ile Tyr Ile Ile Thr Val Met Val Asp Cys Ile Asp
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Phe Ser Pro Tyr Asn Ile Lys Tyr Gln Pro Lys Val Lys Ser Pro Gln
        595                 600                 605
Arg Pro Ser Asp Trp Ser Lys Lys Lys Asn Glu Pro Leu Gly Lys Leu
    610                 615                 620
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Leu Ser Phe Lys Glu Ala His Ser Asp Thr Leu Phe Thr Ile Gly Asn
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Ser Ile Thr Gly Ile Ile Ser Ser Val Leu Gly His Ile Ser Leu Pro
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Ser Met Ile Arg Lys Ile Phe Ala Thr Leu Thr Arg Pro Leu Ala Leu
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Phe Tyr Glu Asn Ser Lys Leu Asp Glu Val Pro Lys Val Tyr Ser Cys
    690                 695                 700
Leu Asn Asn Lys Leu Glu Lys Leu Leu Gly Glu Ile Ile Ala Cys Leu
705                 710                 715                 720
Gln Phe Ser Tyr Thr Gly Thr Tyr Asp Ser Glu Leu Leu Glu Gln Leu
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Ser Pro Leu Leu Cys Ile Ile Phe Leu His Lys Asn Lys Gln Ile Arg
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Lys Phe Leu Leu Leu Leu Pro Gly Leu Glu Thr Val Glu Met Met Glu
785                 790                 795                 800
Glu Ser Ser Gly Pro Tyr Ser Asp Gly Thr Glu Asn Ser Gln Leu Asn
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Val Lys Ile Ser Gly Met Glu Arg Lys Ser Asn Gly Lys Arg Asp Ser
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<213> Homo sapiens

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    50                  55                  60
Lys Thr Arg Leu Met Cys Arg Pro Gln Ile Ile Glu Leu Leu Asp Met
65                  70                  75                  80
Gly Glu Thr Thr His Gln Lys Phe Ser Gly Ile Asp Leu Asp Gln Ala
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Leu Phe Gln Pro Phe Pro Ser Glu Ile Ile Phe Gln Asn Tyr Thr Pro
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Cys Glu Val Tyr Glu Val Pro Leu Ile Leu Arg Asn Asn Asp Lys Ile
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Pro Arg Leu Val Lys Val Val Glu Glu Ser Ser Pro Tyr Phe Lys Val
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Ile Ser Pro Lys Asp Ile Gly His Lys Val Ala Pro Gly Val Pro Ser
145                 150                 155                 160
Ile Phe Arg Ile Leu Phe Thr Pro Glu Glu Asn Lys Asp Tyr Ala His
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Thr Leu Thr Cys Val Thr Glu Arg Glu Lys Phe Ile Val Pro Ile Lys
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Ala Arg Gly Ala Arg Ala Ile Leu Asp Phe Pro Asp Lys Leu Asn Phe
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Ser Thr Cys Pro Val Lys Tyr Ser Thr Gln Lys Ile Leu Leu Val Arg
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Asn Ile Gly Asn Lys Asn Ala Val Phe His Ile Lys Thr Cys Arg Pro
225                 230                 235                 240
Phe Ser Ile Glu Pro Ala Ile Gly Thr Leu Asn Val Gly Glu Ser Met
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Gln Leu Glu Val Glu Phe Glu Pro Gln Ser Val Gly Asp His Ser Gly
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Arg Leu Ile Val Cys Tyr Asp Thr Gly Glu Lys Val Phe Val Ser Leu
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Thr Ile Glu Lys Thr Tyr Ile Ser Leu Ala Asn Gln Arg Thr Ile Thr
305                 310                 315                 320
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                325                 330                 335
Ala Thr Gln Gln Glu Glu Asp Arg Glu Lys Tyr Arg Ala Cys Asp Asp
            340                 345                 350
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Pro Leu Arg Ile Lys Gly Glu Gly Met Gly Pro Thr Ile His Phe Asn
450 455 460
Phe Glu Leu Leu Asp Ile Gly Lys Val Phe Thr Gly Ser Ala His Cys
465 470 475 480
Tyr Glu Ala Ile Leu Tyr Asn Lys Gly Ser Ile Asp Ala Leu Phe Asn
485 490 495
Met Thr Pro Pro Thr Ser Ala Leu Gly Ala Cys Phe Val Phe Ser Pro
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Lys Glu Gly Ile Ile Glu Pro Ser Gly Val Gln Ala Ile Gln Ile Ser
515 520 525
Phe Ser Ser Thr Ile Leu Gly Asn Phe Glu Glu Glu Phe Leu Val Asn
530 535 540
Val Asn Gly Ser Pro Glu Pro Val Lys Leu Thr Ile Arg Gly Cys Val
545 550 555 560
Ile Gly Pro Thr Phe His Phe Asn Val Pro Ala Leu His Phe Gly Asp
565 570 575
Val Ser Phe Gly Phe Pro His Thr Leu Ile Cys Ser Leu Asn Asn Thr
580 585 590
Ser Leu Ile Pro Met Thr Tyr Lys Leu Arg Ile Pro Gly Asp Gly Leu
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Gly His Lys Ser Ile Ser Tyr Cys Glu Gln His Val Asp Tyr Lys Arg
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Pro Ser Trp Thr Lys Glu Glu Ile Ser Ser Met Lys Pro Lys Glu Phe
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Ile Thr Ala Arg Cys Val Val Pro Ala Leu His Leu Val Asn Thr Glu
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Val Asp Phe Gly His Cys Phe Leu Lys Tyr Pro Tyr Glu Lys Thr Leu
705 710 715 720
Gln Leu Ala Asn Gln Asp Asp Leu Pro Gly Phe Tyr Glu Val Gln Pro
725 730 735
Gln Val Cys Glu Glu Val Pro Thr Val Leu Phe Ser Ser Pro Thr Pro
740 745 750
Ser Gly Val Ile Ser Pro Ser Ser Thr Ile His Ile Pro Leu Val Leu
755 760 765
Glu Thr Gln Val Thr Gly Glu His Arg Ser Thr Val Tyr Ile Ser Ile
770 775 780

0050450 .0050800

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Phe Gly Ser Gln Asp Pro Pro Leu Val Cys His Leu Lys Ser Ala Gly
785                 790                 795                 800
Glu Gly Pro Val Ile Tyr Val His Pro Asn Gln Val Asp Phe Gly Asn
                805                 810                 815
Ile Tyr Val Leu Lys Asp Ser Ser Arg Ile Leu Asn Leu Cys Asn Gln
            820                 825                 830
Ser Phe Ile Pro Ala Phe Phe Gln Ala His Met Ala His Lys Lys Ser
        835                 840                 845
Leu Trp Thr Ile Glu Pro Asn Glu Gly Met Val Pro Pro Glu Thr Asp
    850                 855                 860
Val Gln Leu Ala Leu Thr Ala Asn Leu Asn Asp Thr Leu Thr Phe Lys
865                 870                 875                 880
Asp Cys Val Ile Leu Asp Ile Glu Asn Ser Ser Thr Tyr Arg Ile Pro
                885                 890                 895
Val Gln Ala Ser Gly Thr Gly Ser Thr Ile Val Ser Asp Lys Pro Phe
            900                 905                 910
Ala Pro Glu Leu Asn Leu Gly Ala His Phe Ser Leu Asp Thr His Tyr
        915                 920                 925
Tyr His Phe Lys Leu Ile Asn Lys Gly Arg Arg Ile Gln Gln Leu Phe
    930                 935                 940
Trp Met Asn Asp Ser Phe Arg Pro Gln Ala Lys Leu Ser Lys Lys Gly
945                 950                 955                 960
Arg Val Lys Lys Gly His Ala His Val Gln Pro Gln Pro Ser Gly Ser
                965                 970                 975
Gln Glu Pro Arg Asp Pro Gln Ser Pro Val Phe His Leu His Pro Ala
            980                 985                 990
Ser Met Glu Leu Tyr Pro Gly Gln Ala Ile Asp Val Ile Leu Glu Gly
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Tyr Ser Ala Thr Pro Arg Val Arg Gly
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<210> 17334
<211> 2642
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (44)..(751)

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gactacgccg gctgtgctgt tctggcagtg gattaaccag tccttcaatg ccgtcgtcaa 180
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ctcaccactg ataggacgtt ttgttccctt tgctgccgta gctgctgcta attgcattaa 360

0960260.0760800

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caggattctc atggcagccc ctggcatggc catccctcca ttcattatga acactttgga 540
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<210> 17335
<211> 236
<212> PRT
<213> Homo sapiens

<400> 17335
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0050450-0050800

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            20                  25                  30
Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr
        35                  40                  45
Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala
    50                  55                  60
Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn
65                  70                  75                  80
Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe
                85                  90                  95
Ala Ala Val Ala Ala Ala Asn Cys Ile Asn Ile Pro Leu Met Arg Gln
            100                 105                 110
Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
        115                 120                 125
Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val
    130                 135                 140
Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
145                 150                 155                 160
Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp
                165                 170                 175
Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe
            180                 185                 190
Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser
        195                 200                 205
Val Thr Ser Leu Glu Ala Glu Leu Gln Ala Lys Ile Gln Glu Ser His
    210                 215                 220
Pro Glu Leu Arg Arg Val Tyr Phe Asn Lys Gly Leu
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<210> 17336
<211> 2852
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (314)..(736)

<400> 17336

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09525460.070800

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agcaaagatg gatatattgg tgactgagac agaagaactg gcagagaata tactcaagtg 600
gcgtaaacaa caaaacgaag tttcgtcttg tatccccaaa atattagctg aagaaagtta 660
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<210> 17337
<211> 141
<212> PRT
<213> Homo sapiens

0960460-070800

<400> 17337

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             20                  25                  30
Val Tyr His Arg Tyr Met Val His Leu Leu Glu Leu Ala Val Thr Phe
         35                  40                  45
Ile Glu Arg Leu Glu Thr His Leu Glu Thr Ile Arg Asn Ile Pro His
     50                  55                  60
Leu Ala Ala Asn Leu Lys Lys Met Asn Gln Ala Leu Ala Lys Met Asp
 65                  70                  75                  80
Ile Leu Val Thr Glu Thr Glu Glu Leu Ala Glu Asn Ile Leu Lys Trp
                 85                  90                  95
Arg Lys Gln Gln Asn Glu Val Ser Ser Cys Ile Pro Lys Ile Leu Ala
            100                 105                 110
Glu Glu Ser Tyr Leu Tyr Lys His Asp Ile Ile Met Pro Pro Leu Pro
        115                 120                 125
Phe Thr Ser Lys Val His Val Gln Thr Ile Asn Ala Lys
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<210> 17338
<211> 2842
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (645)..(2723)

<400> 17338

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0050-0042-0000

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<210> 17339
<211> 693
<212> PRT
<213> Homo sapiens

<400> 17339
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Ser Leu Pro Met Asp Leu Leu Leu Lys Gln Gly Ser Leu Lys Gln Glu
35 40 45
Val Glu Ser Phe Cys Tyr Gln Ile Val Ser Glu Ser Asn Asp Gln Lys
50 55 60
Val Gly Ile Leu Gln Ser Glu Asp Lys Gln Leu Gln Pro Ser Val Ser

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 65                  70                  75                  80
Lys Lys Ser Glu Gly Glu Leu Ser Arg Val Lys Phe Ile Ser Asn Ser
                 85                  90                  95
Asn Lys Ile Thr Phe Ser Lys Lys Pro Lys Arg Arg Lys Tyr Asp Glu
            100                 105                 110
Ser Tyr Leu Ser Phe Gly Phe Thr Tyr Phe Gly Asn Arg Asp Ala Pro
        115                 120                 125
His Ala Gln Cys Val Leu Cys Lys Lys Ile Leu Ser Asn Ser Ser Leu
    130                 135                 140
Ala Pro Ser Lys Leu Arg Arg His Leu Glu Thr Lys His Ala Ala Tyr
145                 150                 155                 160
Lys Asp Lys Asp Ile Ser Phe Phe Lys Gln His Leu Asp Ser Pro Glu
                165                 170                 175
Asn Asn Lys Pro Pro Thr Pro Lys Ile Val Asn Thr Asp Asn Glu Ser
            180                 185                 190
Ala Thr Glu Ala Ser Tyr Asn Val Ser Tyr His Ile Ala Leu Ser Gly
        195                 200                 205
Glu Ala His Thr Ile Gly Glu Leu Leu Thr Lys Pro Cys Ala Lys Asp
    210                 215                 220
Val Val Met Arg Met Phe Asp Glu Gln Tyr Ser Lys Lys Ile Asp Ala
225                 230                 235                 240
Val Gln Leu Ser Asn Ser Thr Val Ala Arg Arg Ile Lys Asp Leu Ala
                245                 250                 255
Ala Asp Ile Glu Glu Glu Leu Val Cys Arg Leu Lys Ile Cys Asp Gly
            260                 265                 270
Phe Ser Leu Gln Leu Asp Glu Ser Ala Asp Val Ser Gly Leu Ala Val
        275                 280                 285
Leu Leu Val Phe Val Arg Tyr Arg Phe Asn Lys Ser Ile Glu Glu Asp
    290                 295                 300
Leu Leu Leu Cys Glu Ser Leu Gln Ser Asn Ala Thr Gly Glu Glu Ile
305                 310                 315                 320
Phe Asn Cys Ile Asn Ser Phe Met Gln Lys His Glu Ile Glu Trp Glu
                325                 330                 335
Lys Cys Val Asp Val Cys Ser Asp Ala Ser Arg Ala Val Asp Gly Lys
            340                 345                 350
Ile Ala Glu Ala Val Thr Leu Ile Lys Tyr Val Ala Pro Glu Ser Thr
        355                 360                 365
Ser Ser His Cys Leu Leu Tyr Arg His Ala Leu Ala Val Lys Ile Met
    370                 375                 380
Pro Thr Ser Leu Lys Asn Val Leu Asp Gln Ala Val Gln Ile Ile Asn
385                 390                 395                 400
Tyr Ile Lys Ala Arg Pro His Gln Ser Arg Leu Leu Lys Ile Leu Cys
                405                 410                 415
Glu Glu Met Gly Ala Gln His Thr Ala Leu Leu Leu Asn Thr Glu Val
            420                 425                 430
Arg Trp Leu Ser Arg Gly Lys Val Leu Val Arg Leu Phe Glu Leu Arg
        435                 440                 445
Arg Glu Leu Leu Val Phe Met Asp Ser Ala Phe Arg Leu Ser Asp Cys
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0960460-0960800

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Phe Thr Lys Leu Asn Glu Val Asn Leu Ser Met Gln Gly Lys Asn Val
                485                 490                 495
Thr Val Phe Thr Val Phe Asp Lys Met Ser Ser Leu Leu Arg Lys Leu
            500                 505                 510
Glu Phe Trp Ala Ser Ser Val Glu Glu Glu Asn Phe Asp Cys Phe Pro
        515                 520                 525
Thr Leu Ser Asp Phe Leu Thr Glu Ile Asn Ser Thr Val Asp Lys Asp
    530                 535                 540
Ile Cys Asn Ala Ile Val Gln His Leu Arg Gly Leu Arg Val Thr Leu
545                 550                 555                 560
Leu Lys Tyr Phe Pro Val Thr Asn Asp Asn Asn Ala Trp Val Arg Asn
                565                 570                 575
Pro Phe Thr Val Thr Val Lys Pro Ala Ser Leu Val Ala Arg Asp Tyr
            580                 585                 590
Glu Ser Leu Ile Asp Leu Thr Ser Asp Ser Gln Val Lys Gln Asn Phe
        595                 600                 605
Ser Glu Leu Ser Leu Asn Asp Phe Trp Ser Ser Leu Ile Gln Glu Tyr
    610                 615                 620
Pro Ser Ile Ala Arg Arg Ala Val Arg Val Leu Leu Pro Phe Ala Thr
625                 630                 635                 640
Met His Leu Cys Glu Thr Gly Phe Ser Tyr Tyr Ala Ala Thr Lys Thr
                645                 650                 655
Lys Tyr Arg Lys Arg Leu Asp Ala Ala Pro His Met Arg Ile Arg Leu
            660                 665                 670
Ser Asn Ile Thr Pro Asn Ile Lys Trp Ile Cys Asp Lys Lys Thr Gln
        675                 680                 685
Lys His Cys Ser His
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<210> 17340
<211> 2645
<212> DNA
<213> Homo sapiens

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35 40 45
Ala Asp Ser Leu Thr Ser Leu Arg Lys Leu Ala Glu Gln Phe Pro Arg
50 55 60
Gln Val Leu Asp Ser Lys Ala Pro Lys Pro Glu Asp Ile Asp Glu Glu
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Lys Ala Ala Arg Lys Ser Gly Gln Leu Asn Leu Ser Gly Arg Asn Leu
35 40 45
Ser Glu Val Pro Gln Cys Val Trp Arg Ile Asn Val Asp Ile Pro Glu
50 55 60
Glu Ala Asn Gln Asn Leu Ser Phe Gly Ala Thr Glu Arg Trp Trp Glu
65 70 75 80
Gln Thr Asp Leu Thr Lys Leu Ile Ile Ser Asn Asn Lys Leu Gln Ser
85 90 95
Leu Thr Asp Asp Leu Arg Leu Leu Pro Ala Leu Thr Val Leu Asp Ile
100 105 110
His Asp Asn Gln Leu Thr Ser Leu Pro Ser Ala Ile Arg Glu Leu Glu
115 120 125
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Glu Glu Ile Thr Asn Leu Arg Asn Leu Lys Cys Leu Tyr Leu Gln His
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180 185 190
Phe Ser Ser Leu Ser Ser Leu Val Arg Leu Asn Leu Ser Ser Asn Glu
195 200 205
Leu Lys Ser Leu Pro Ala Glu Ile Asn Arg Met Lys Arg Leu Lys His
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225 230 235 240
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245 250 255
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260 265 270
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Ser Phe Pro Val Trp Gly Asp Arg Arg Val Ala Thr Glu Pro Gly Ser
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Ala Leu Gly Ala Ala Gly Leu Gln Thr Trp Leu Trp Ser Cys Ser Pro
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<211> 514
<212> PRT
<213> Homo sapiens

<400> 17352

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     50                  55                  60
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Gln Ala Tyr Arg Asp Lys Leu Ala Gln Gln Gln Ala Ala Ala Ala Ala
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His Thr Asp Met Met Glu Val Asp Gly Asp Val Glu Ile Pro Pro Asn
145                 150                 155                 160
Lys Ala Val Val Leu Arg Gly His Glu Ser Glu Val Phe Ile Cys Ala
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Thr Phe Ala Ser Cys Ser Thr Asp Met Cys Ile His Val Cys Lys Leu
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Gly Gln Asp Arg Pro Ile Lys Thr Phe Gln Gly His Thr Asn Glu Val
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            340                 345                 350
Asn Ala Ile Lys Trp Asp Pro Thr Gly Asn Leu Leu Ala Ser Cys Ser
        355                 360                 365
Asp Asp Met Thr Leu Lys Ile Trp Ser Met Lys Gln Asp Asn Cys Val
    370                 375                 380
His Asp Leu Gln Ala His Asn Lys Glu Ile Tyr Thr Ile Lys Trp Ser
385                 390                 395                 400
Pro Thr Gly Pro Gly Thr Asn Asn Pro Asn Ala Asn Leu Met Leu Ala
                405                 410                 415
Ser Ala Ser Phe Asp Ser Thr Val Arg Leu Trp Asp Val Asp Arg Gly
            420                 425                 430
Ile Cys Ile His Thr Leu Thr Lys His Gln Glu Pro Val Tyr Ser Val
        435                 440                 445
Ala Phe Ser Pro Asp Gly Arg Tyr Leu Ala Ser Gly Ser Phe Asp Lys
    450                 455                 460
Cys Val His Ile Trp Asn Thr Gln Thr Gly Ala Leu Val His Ser Tyr
465                 470                 475                 480
Arg Gly Thr Gly Gly Ile Phe Glu Val Cys Trp Asn Ala Ala Gly Asp
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (90)..(422)

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0000000-0000000

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<210> 17354
<211> 111
<212> PRT
<213> Homo sapiens

<400> 17354
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20 25 30
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35 40 45

09609450.0N5800

Gln Asn Arg Tyr Leu Asp Gly Met Asp Ser Asp Phe Thr Ser Met Thr
50 55 60
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65 70 75 80
Gly Gln Asp Asn Arg Lys Leu Leu Cys Gly Met Ala Val Gly Leu Ile
85 90 95
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100 105 110

<210> 17355
<211> 1098
<212> DNA
<213> Homo sapiens

<400> 17355
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (132)..(548)

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09529805.030800

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<210> 17357
<211> 139
<212> PRT

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<213> Homo sapiens

<400> 17357

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Gly Thr Ser Ala Gly Val His Val Tyr Asn Val Lys Gln Leu Lys Leu
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His Cys Thr Val Pro Ala Tyr Asn Phe Pro Val Thr Ala Met Ala Ile
        35                  40                  45
Ala Pro Asn Thr Asn Asn Leu Val Ile Ala His Ser Asp Gln Gln Val
    50                  55                  60
Phe Glu Tyr Ser Ile Pro Asp Lys Gln Tyr Thr Asp Trp Ser Arg Thr
65                  70                  75                  80
Val Gln Lys Gln Gly Phe His His Leu Trp Leu Gln Arg Asp Thr Pro
                85                  90                  95
Ile Thr His Ile Ser Phe His Pro Lys Arg Pro Met His Ile Leu Leu
            100                 105                 110
His Asp Ala Tyr Met Phe Cys Ile Ile Asp Lys Ser Leu Val Ser Ser
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Ser Leu Leu Pro Pro Lys Ser Ser Ser Glu Ser
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<210> 17358
<211> 2272
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (142)..(2034)

<400> 17358

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05525450.027800

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09054600-092800

<210> 17359
<211> 631
<212> PRT
<213> Homo sapiens

<400> 17359
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Leu Lys Gly Leu Phe Arg Gln Gly Met Gln Cys Lys Asp Cys Lys Phe
35 40 45
Asn Cys His Lys Arg Cys Ala Ser Lys Val Pro Arg Asp Cys Leu Gly
50 55 60
Glu Val Thr Phe Asn Gly Glu Pro Ser Ser Leu Gly Thr Asp Thr Asp
65 70 75 80
Ile Pro Met Asp Ile Asp Asn Asn Asp Ile Asn Ser Asp Ser Ser Arg
85 90 95
Gly Leu Asp Asp Thr Glu Glu Pro Ser Pro Pro Glu Asp Lys Met Phe
100 105 110
Phe Leu Asp Pro Ser Asp Leu Asp Val Glu Arg Asp Glu Glu Ala Val
115 120 125
Lys Thr Ile Ser Pro Ser Thr Ser Asn Asn Ile Pro Leu Met Arg Val

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Val Gln Ser Ile Lys His Thr Lys Arg Lys Ser Ser Thr Met Val Lys
145                 150                 155                 160
Glu Gly Trp Met Val His Tyr Thr Ser Arg Asp Asn Leu Arg Lys Arg
                165                 170                 175
His Tyr Trp Arg Leu Asp Ser Lys Cys Leu Thr Leu Phe Gln Asn Glu
            180                 185                 190
Ser Gly Ser Lys Tyr Tyr Lys Glu Ile Pro Leu Ser Glu Ile Leu Arg
        195                 200                 205
Ile Ser Ser Pro Arg Asp Phe Thr Asn Ile Ser Gln Gly Ser Asn Pro
    210                 215                 220
His Cys Phe Glu Ile Ile Thr Asp Thr Met Val Tyr Phe Val Gly Glu
225                 230                 235                 240
Asn Asn Gly Asp Ser Ser His Asn Pro Val Leu Ala Ala Thr Gly Val
                245                 250                 255
Gly Leu Asp Val Ala Gln Ser Trp Glu Lys Ala Ile Arg Gln Ala Leu
            260                 265                 270
Met Pro Val Thr Pro Gln Ala Ser Val Cys Thr Ser Pro Gly Gln Gly
        275                 280                 285
Lys Asp His Lys Asp Leu Ser Thr Ser Ile Ser Val Ser Asn Cys Gln
    290                 295                 300
Ile Gln Glu Asn Val Asp Ile Ser Thr Val Tyr Gln Ile Phe Ala Asp
305                 310                 315                 320
Glu Val Leu Gly Ser Gly Gln Phe Gly Ile Val Tyr Gly Gly Lys His
                325                 330                 335
Arg Lys Thr Gly Arg Asp Val Ala Ile Lys Val Ile Asp Lys Met Arg
            340                 345                 350
Phe Pro Thr Lys Gln Glu Ser Gln Leu Arg Asn Glu Val Ala Ile Leu
        355                 360                 365
Gln Asn Leu His His Pro Gly Ile Val Asn Leu Glu Cys Met Phe Glu
    370                 375                 380
Thr Pro Glu Arg Val Phe Val Val Met Glu Lys Leu His Gly Asp Met
385                 390                 395                 400
Leu Glu Met Ile Leu Ser Ser Glu Lys Ser Arg Leu Pro Glu Arg Ile
                405                 410                 415
Thr Lys Phe Met Val Thr Gln Ile Leu Val Ala Leu Arg Asn Leu His
            420                 425                 430
Phe Lys Asn Ile Val His Cys Asp Leu Lys Pro Glu Asn Val Leu Leu
        435                 440                 445
Ala Ser Ala Glu Pro Phe Pro Gln Val Lys Leu Cys Asp Phe Gly Phe
    450                 455                 460
Ala Arg Ile Ile Gly Glu Lys Ser Phe Arg Arg Ser Val Val Gly Thr
465                 470                 475                 480
Pro Ala Tyr Leu Ala Pro Glu Val Leu Arg Ser Lys Gly Tyr Asn Arg
                485                 490                 495
Ser Leu Asp Met Trp Ser Val Gly Val Ile Ile Tyr Val Ser Leu Ser
            500                 505                 510
Gly Thr Phe Pro Phe Asn Glu Asp Glu Asp Ile Asn Asp Gln Ile Gln
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545                 550                 555                 560
Arg Tyr Ser Val Asp Lys Ser Leu Ser His Pro Trp Leu Gln Asp Tyr
                565                 570                 575
Gln Thr Trp Leu Asp Leu Arg Glu Phe Glu Thr Arg Ile Gly Glu Arg
            580                 585                 590
Tyr Ile Thr His Glu Ser Asp Asp Ala Arg Trp Glu Ile His Ala Tyr
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<210> 17360
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<212> DNA
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<220>
<221> CDS
<222> (42)..(1883)

<400> 17360

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Glu Thr Asn Gln Leu Asp Met Asp Ala Thr Leu Glu Glu Leu Ser Val
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Glu Ala Leu Pro Pro Pro Ala Cys Pro Ser Ala Pro Ala Pro Arg Arg
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Thr Met Phe Asn Ser Thr Asp Ile Lys Leu Ser Val Lys Ser Phe His
65 70 75 80
Cys Ser Gly Pro Val Lys Phe Thr Ile Val Trp His Leu Lys Tyr His
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Thr Cys His Asn Glu His Ser Asn Leu Glu Glu Leu Phe Gln Lys His
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Lys Leu Ser Val Asp Glu Asp Phe Cys His Tyr Leu Lys Asn Asp Asn

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<212> PRT
<213> Homo sapiens

<400> 17367

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Cys	His	Phe	Ala	Arg	Ser	Arg	Phe	Leu	Gln	Ile	Leu	Gln	Arg	Gln	Asp
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Cys	Val	Thr	Gln	Lys	Tyr	Gln	Glu	Asn	Ala	Gln	Leu	Ser	Val	Lys	Gln
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Tyr	Ala	Leu	Asp	Gly	Thr	Asn	Val	Ala	Ile	Asn	Ile	Pro	Arg	Leu	Leu
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225                 230                 235                 240
His Lys Lys Trp Lys Glu Phe Leu Gly Leu Ser Pro Phe Ser Leu Ile
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Lys Gly Trp Thr Pro Ser Val Asp Leu Leu Pro Pro Met Ser Pro Leu
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Glu Asn Ser Pro Leu Ser Asp Val Ala Lys Asn Thr Glu Ser Ser Ala
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Pro Gln Leu Ser Glu Gly Lys Glu Ile Lys Leu Glu Glu Leu Ile Asp
            420                 425                 430
Ser Leu Gly Ser Asn Pro Phe Leu Thr Arg Asn Gln Ile Pro Arg Thr
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Pro Glu Asn Leu Ile Thr Glu Ile Arg Ser Ser Trp Arg Lys Ala Ile
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His Arg Glu Val Leu Pro Glu Ser Leu Pro Val Leu His Asn Gln Arg
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Glu Phe Ser Met Ala Asp Phe Leu Leu Glu Thr Thr Val Ser Asp Phe
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Gly Gln Ser His Leu Thr Glu Glu Lys Val Ile Ser Asp Cys Glu Cys
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Ser Ser Ser Glu Ala Asn Phe Lys Leu Glu Pro Asn Ser Pro Met His
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Gly Gly Thr Leu Leu Glu Asp Val Val Gly Gly Arg Gln Thr Thr Pro
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Glu Ser Asp Phe Asn Leu Gln Ala Leu Arg Ser Arg Tyr Glu Ala Leu
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35 40 45

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Thr Val Leu Phe Pro Ala Lys Asp Leu Lys Glu Lys Asp Leu His Ser
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Ile Phe Thr His Asp Ser Gly Leu Ile Thr Ile Asn Ser Ser Gln Glu
            100                 105                 110
His Leu Thr Val Gln Ala Lys Ala Pro Phe His Thr Pro Pro Glu Glu
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Pro Asn Glu Cys Asp Phe Lys Asn Met Asp Ser Leu Pro Ser Gly Lys
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Ile His Arg Lys Val Lys Ile Ile Leu Gly Arg Asn Arg Lys Glu Asn
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Glu Glu Asn Arg Ile Cys Ser Ser Pro Val Gln Ser Leu Leu Asp Leu
            180                 185                 190
Phe Gln Thr Ser Glu Glu Lys Ser Glu Phe Leu Gly Phe Thr Ser Tyr
        195                 200                 205
Thr Glu Lys Ser Gly Ile Cys Asn Val Leu Asp Ile Trp Glu Glu Glu
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<213> Homo sapiens

<400> 17373

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Glu Glu Gly Val Glu Ala Glu Lys Lys Ala Ile Ser Leu Leu Ser Lys
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 65                  70                  75                  80
Lys Phe Val Asp Thr Asp Ile Trp Asn Gln Tyr Leu Glu Tyr Gln Gln
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Trp Leu Leu Val Glu Cys Tyr Met Tyr Arg Arg Ile His Glu Ala Ile
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Ile Gln Ser Pro Pro Ile Asp Tyr Phe Asp Val Phe Lys Glu Ser Lys
    130                 135                 140
Glu Gln Asn Phe Tyr Gly Ser Gln Glu Ser Ile Ile Ala Leu Cys Thr
145                 150                 155                 160
His Leu Gln Gln Leu Ile Arg Thr Ile Glu Asp Leu Asp Glu Asn Gln
                165                 170                 175
Leu Lys Asp Glu Phe Phe Lys Leu Leu Gln Ile Ser Leu Trp Gly Asn
            180                 185                 190
Lys Cys Asp Leu Ser Leu Ser Gly Gly Glu Ser Ser Ser Gln Asn Thr
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            260                 265                 270
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Val Ser Asp Thr Thr Ile His Asp Phe Asn Trp Leu Ile Glu Gln Val
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Lys His Ser Asn His Lys Trp Met Ser Lys Cys Gly Ala Asp Trp Glu
305                 310                 315                 320
Glu Tyr Ile Lys Met Gly Lys Trp Val Tyr His Asn His Ile Phe Trp
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Thr Leu Pro His Glu Tyr Cys Ala Met Pro Gln Val Ala Pro Asp Leu
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Tyr Ala Glu Leu Gln Lys Ala His Leu Ile Leu Phe Lys Gly Asp Leu
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<212> PRT
<213> Homo sapiens

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Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser
65                  70                  75                  80
Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys
                85                  90                  95
Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn
            100                 105                 110
Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser
        115                 120                 125
Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg
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Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr
145                 150                 155                 160
Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg
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Val Pro Ser Tyr Ser Gln Gly Ala Arg Pro Lys Glu Asn Ser Met Ser
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Thr Leu Gln Leu Asn Thr Ser Ser Thr Asn His Gln Leu Pro Ser Glu
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His Gln Thr Ile Leu Ser Ser Arg Asp Ser Arg Asn Ser Leu Arg Ser
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Asn Phe Ser Ser Arg Glu Ser Glu Ser Ser Arg Ser Asn Thr Gln Pro
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Gly Phe Ser Tyr Ser Ser Ser Arg Asp Glu Ala Pro Ile Ile Ser Asn
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Ser Glu Arg Val Val Ser Ser Gln Arg Pro Phe Gln Glu Ser Ser Asp
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Gly Ser Leu Phe Arg Phe Ala Val Pro Pro Ala Leu Gly Ser Asn Leu
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Thr Asp Asn Val Met Ile Thr Val Asp Ile Ile Pro Ser Gly Trp Asn
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Ser Ala Asp Gly Lys Ser Asp Lys Thr Lys Ser Ala Pro Ser Arg Asp
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Gln Tyr Val His Gln Asp Cys Met Lys Lys Trp Leu Gln Ala Lys Ile
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Asn Ser Gly Ser Ser Leu Glu Ala Val Thr Thr Cys Glu Leu Cys Lys
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Glu Lys Leu Glu Leu Asn Leu Glu Asp Phe Asp Ile His Glu Leu His
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Arg Ala His Ala Asn Glu Gln Ala Glu Tyr Glu Phe Ile Ser Ser Gly
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Met Met Gly Asn Thr Asn Glu Pro Ser Thr Arg Val Arg Phe Ile Asn
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<212> DNA
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<213> Homo sapiens

<400> 17382

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Val	Glu	Ser	Ser	Lys	Pro	Pro	Glu	Val	Asp	Ala	Pro	Asp	Lys	Thr	Pro
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Arg	Ile	Pro	Asp	Ser	Glu	Met	Leu	Met	Asp	Glu	Gly	Thr	Ser	Asp	Glu
65					70					75					80
Lys	Gly	His	Met	Glu	Glu	Lys	Leu	Ser	Leu	Leu	Pro	Arg	Lys	Lys	Ala
				85					90					95	
His	Leu	Gly	Ser	Ser	Asp	Asn	Val	Ala	Thr	Met	Ser	Asn	Glu	Glu	Arg
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Ser	Asp	Gly	Gly	Phe	Pro	Asn	Ser	Val	Ile	Ala	Glu	Phe	Ser	Glu	Glu
		115					120					125			
Pro	Val	Ser	Glu	Asn	Leu	Ser	Pro	Asn	Thr	Thr	Ser	Ser	Leu	Glu	Asp
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Gln	Gly	Glu	Glu	Gly	Val	Ser	Glu	Pro	Gln	Glu	Thr	Ser	Thr	Ala	Leu
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Pro	Gln	Ser	Ser	Leu	Ile	Glu	Val	Glu	Leu	Glu	Asp	Val	Pro	Phe	Ser
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0060-0056-0450-0000

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Ser Glu Gln Leu Asp Gln Phe Thr Gln Ser Ala Glu Lys Ala Val Asp
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Ser Ser Ser Glu Glu Ile Glu Val Glu Val Pro Val Val Asp Arg Arg
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0060260-0060260

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<213> Homo sapiens

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<400> 17383

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<212> PRT
<213> Homo sapiens

<400> 17384
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0050204.0050450

0005250-960206

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Glu Asn Met Lys Arg Pro Ala Glu Ser Lys Asn Asn Thr Val Val Gly
                 85                  90                  95
Lys His Cys Ile Pro Leu Lys Pro Ser Asn Glu Leu Thr Asn Ser Thr
            100                 105                 110
Val Val Ile Asp Thr His Lys Pro Lys Asp Ser Asn Gln Thr Pro His
        115                 120                 125
Leu Leu Leu Thr Glu Asp Asp Pro Gln Ser Gln His Met Thr Leu Ser
    130                 135                 140
Gln Ala Phe His Leu Lys Asn Asn Ser Lys Lys Lys Gln Met Thr Thr
145                 150                 155                 160
Glu Lys Gln Lys Gln Asp Ala Asn Met Pro Lys Lys Pro Val Leu Gly
                165                 170                 175
Ser Tyr Arg Gly Gln Ile Val Gln Ser Lys Ile Asn Ser Phe Arg Lys
            180                 185                 190
Pro Leu Gln Val Lys Asp Glu Ser Ser Ala Ala Thr Lys Lys Leu Ser
        195                 200                 205
Ala Thr Ile Pro Lys Ala Thr Lys Pro Gln Pro Val Asn Thr Ser Ser
    210                 215                 220
Val Thr Val Lys Ser Asn Arg Ser Ser Asn Met Thr Ala Thr Thr Lys
225                 230                 235                 240
Phe Val Ser Thr Thr Ser Gln Asn Thr Gln Leu Val Arg Pro Pro Ile
                245                 250                 255
Arg Ser His His Ser Asn Thr Arg Asp Thr Val Lys Gln Gly Ile Ser
            260                 265                 270
Arg Thr Ser Ala Asn Val Thr Ile Arg Lys Gly Pro His Glu Lys Glu
        275                 280                 285
Leu Leu Gln Ser Lys Thr Ala Leu Ser Ser Val Lys Thr Ser Ser Ser
    290                 295                 300
Gln Gly Ile Ile Arg Asn Lys Thr Leu Ser Arg Ser Ile Ala Ser Glu
305                 310                 315                 320
Val Val Ala Arg Pro Ala Ser Leu Ser Asn Asp Lys Leu Met Glu Lys
                325                 330                 335
Ser Glu Pro Val Asp Gln Arg Arg His Thr Ala Gly Lys Ala Ile Val
            340                 345                 350
Asp Ser Arg Ser Ala Gln Pro Lys Glu Thr Ser Glu Glu Arg Lys Ala
        355                 360                 365
Arg Leu Ser Glu Trp Lys Ala Gly Lys Gly Arg Val Leu Lys Arg Pro
    370                 375                 380
Pro Asn Ser Val Val Thr Gln His Glu Pro Ala Gly Gln Asn Glu Lys
385                 390                 395                 400
Pro Val Gly Ser Phe Trp Thr Thr Met Ala Glu Glu Asp Glu Gln Arg
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Leu Phe Thr Glu Lys Val Asn Asn Thr Phe Ser Glu Cys Leu Asn Leu
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            420                 425                 430
Ile Asn Glu Gly Cys Pro Lys Glu Asp Ile Leu Val Thr Leu Asn Asp
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Leu Ile Lys Asn Ile Pro Asp Ala Lys Lys Leu Val Lys Tyr Trp Ile
    450                 455                 460
Cys Leu Ala Leu Ile Glu Pro Ile Thr Ser Pro Ile Glu Asn Ile Ile
465                 470                 475                 480
Ala Ile Tyr Glu Lys Ala Ile Leu Ala Gly Ala Gln Pro Ile Glu Glu
                485                 490                 495
Met Arg His Thr Ile Val Asp Ile Leu Thr Met Lys Ser Gln Glu Lys
            500                 505                 510
Ala Asn Leu Gly Glu Asn Met Glu Lys Ser Cys Ala Ser Lys Glu Glu
        515                 520                 525
Val Arg Glu Val Ser Ile Glu Asp Thr Gly Val Asp Val Asp Pro Glu
    530                 535                 540
Lys Leu Glu Met Glu Ser Lys Leu His Arg Asn Leu Leu Leu Gln Asp
545                 550                 555                 560
Cys Glu Lys Glu Gln Asp Asn Lys Thr Lys Asp Pro Thr His Asp Ala
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Lys Thr Pro Asn Thr Glu Thr Arg Thr Ser Cys Leu Ile Lys Tyr Asn
            580                 585                 590
Val Ser Thr Thr Pro Tyr Leu Gln Ser Val Lys Lys Lys Val Gln Phe
        595                 600                 605
Asp Gly Thr Asn Ser Ala Phe Lys Glu Leu Lys Phe Leu Thr Pro Val
    610                 615                 620
Arg Arg Ser Arg Arg Leu Gln Glu Lys Thr Ser Lys Leu Pro Asp Met
625                 630                 635                 640
Leu Lys Asp His Tyr Pro Cys Val Ser Ser Leu Glu Gln Leu Thr Glu
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Leu Gly Arg Glu Thr Asp Ala Phe Val Cys Arg Pro Asn Ala Ala Leu
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<213> Homo sapiens

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<222> (100)..(2274)

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0050250-0050450

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<212> PRT
<213> Homo sapiens

<400> 17386
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0050-0050-0050-

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        50                  55                  60
Lys Asn Leu Asn Met Asn Arg Ala Pro Asp Asn Ile Ile Lys Phe Tyr
65                  70                  75                  80
Lys Lys Thr Lys Gln Leu Pro Val Leu Gly Lys Cys Cys Glu Glu Ile
                85                  90                  95
Gln Pro His Gln Trp Lys Pro Pro Ile Glu Arg Glu Glu His Arg Leu
            100                 105                 110
Pro Phe Trp Leu Lys Ala Ser Leu Pro Ser Ile Gln Glu Glu Leu Arg
        115                 120                 125
His Met Ala Asp Gly Ala Arg Glu Val Gly Asn Met Thr Gly Thr Thr
    130                 135                 140
Glu Ile Asn Ser Asp Arg Ser Leu Glu Lys Asp Asn Leu Glu Leu Gly
145                 150                 155                 160
Ser Glu Ser Arg Tyr Pro Leu Leu Leu Pro Lys Gly Val Val Leu Lys
                165                 170                 175
Leu Lys Pro Val Ala Thr Arg Phe Pro Arg Lys Ala Trp Arg Gln Lys
            180                 185                 190
Arg Ser Ser Val Leu Lys Pro Leu Leu Ile Gln Pro Ser Pro Ser Leu
        195                 200                 205
Gln Pro Ser Phe Asn Pro Gly Lys Thr Pro Ala Arg Ser Thr His Ser
    210                 215                 220
Glu Ala Pro Ser Ser Lys Met Val Leu Arg Ile Pro His Pro Ile Gln
225                 230                 235                 240
Pro Ala Thr Val Leu Gln Thr Val Pro Gly Val Pro Pro Leu Gly Val
                245                 250                 255
Ser Gly Gly Glu Ser Phe Glu Ser Pro Ala Ala Leu Pro Ala Val Pro
            260                 265                 270
Pro Glu Ala Arg Thr Ser Phe Pro Leu Ser Glu Ser Gln Thr Leu Leu
        275                 280                 285
Ser Ser Ala Pro Val Pro Lys Val Met Leu Pro Ser Leu Ala Pro Ser
    290                 295                 300
Lys Phe Arg Lys Pro Tyr Val Arg Arg Arg Pro Ser Lys Arg Arg Gly
305                 310                 315                 320
Val Lys Ala Ser Pro Cys Met Lys Pro Ala Pro Val Ile His His Pro
                325                 330                 335
Ala Ser Val Ile Phe Thr Val Pro Ala Thr Thr Val Lys Ile Val Ser
            340                 345                 350
Leu Gly Gly Gly Cys Asn Met Ile Gln Pro Val Asn Ala Ala Val Ala
        355                 360                 365
Gln Ser Pro Gln Thr Ile Pro Ile Thr Thr Leu Leu Val Asn Pro Thr
    370                 375                 380
Ser Phe Pro Cys Pro Leu Asn Gln Ser Leu Val Ala Ser Ser Val Ser
385                 390                 395                 400
Pro Leu Ile Val Ser Gly Asn Ser Val Asn Leu Pro Ile Pro Ser Thr
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0050504-0050504

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        435                 440                 445
Glu Leu Ser Pro Leu Ser Ala Thr Val Phe Pro Lys Val Glu His Ser
    450                 455                 460
Pro Gly Pro Pro Leu Ala Asp Ala Glu Cys Gln Glu Gly Leu Ser Glu
465                 470                 475                 480
Asn Ser Ala Cys Arg Trp Thr Val Val Lys Thr Glu Glu Gly Arg Gln
                485                 490                 495
Ala Leu Glu Pro Leu Pro Gln Gly Ile Gln Glu Ser Leu Asn Asn Pro
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Thr Pro Gly Asp Leu Glu Glu Ile Val Lys Met Glu Pro Glu Glu Ala
        515                 520                 525
Arg Glu Glu Ile Ser Gly Ser Pro Glu Arg Asp Ile Cys Asp Asp Ile
    530                 535                 540
Lys Val Glu His Ala Val Glu Leu Asp Thr Gly Ala Pro Ser Glu Glu
545                 550                 555                 560
Leu Ser Ser Ala Gly Glu Val Thr Lys Gln Thr Val Leu Gln Lys Glu
                565                 570                 575
Glu Glu Arg Ser Gln Pro Thr Lys Thr Pro Ser Ser Ser Gln Glu Pro
            580                 585                 590
Pro Asp Glu Gly Thr Ser Gly Thr Asp Val Asn Lys Gly Ser Ser Lys
        595                 600                 605
Asn Ala Leu Ser Ser Met Asp Pro Glu Val Arg Leu Ser Ser Pro Pro
    610                 615                 620
Gly Lys Pro Glu Asp Ser Ser Ser Val Asp Gly Gln Ser Val Gly Thr
625                 630                 635                 640
Pro Val Gly Pro Glu Thr Gly Gly Glu Lys Asn Gly Pro Glu Glu Glu
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Glu Glu Glu Asp Phe Asp Asp Leu Thr Gln Asp Glu Glu Asp Glu Met
            660                 665                 670
Ser Ser Ala Ser Glu Glu Ser Val Leu Ser Val Pro Glu Leu Gln Val
        675                 680                 685
Arg Ala Gly Glu Tyr Ser Gln Val Phe Arg Gly Leu Ser Asn Met Tyr
    690                 695                 700
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Lys Ile Ile Cys Ile
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<212> DNA
<213> Homo sapiens

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0052760-0052950

<400> 17387

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Tyr Gln Glu Gly Val Ser Asn Ala Leu Leu Lys Met Ala Glu Leu Gly
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Phe Glu Asp Pro Val Thr Tyr Tyr Thr Ala Leu His Ile Ala Val Leu
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Arg Asn Gln Pro Asp Met Val Glu Leu Leu Val His His Gly Ala Asp
115 120 125
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Ser Glu Glu Pro Glu Arg Leu Pro Cys Leu Gln Arg Leu Leu Asp Leu
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Gly Ala Asp Val Asn Ala Ala Asp Lys His Gly Lys Thr Ala Leu Leu
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Ile Arg Leu Leu Leu Glu Gly Gly Ala Asp Val Lys Ala Thr Thr Lys
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Pro Ala His Glu Ser Leu Thr His Ile Cys Leu Lys Ser Phe Lys Leu
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35 40 45
Ala Pro Thr Ser Phe Leu Pro Pro Glu Ala Ser Gln Leu Lys Pro Asp
50 55 60
Arg Gln Gln Phe Gln Ser Arg Lys Arg Pro Tyr Glu Glu Asn Arg Gly
65 70 75 80
Arg Gly Tyr Phe Glu His Arg Glu Asp Arg Arg Gly Arg Ser Pro Gln
85 90 95
Pro Pro Ala Glu Glu Asp Glu Asp Asp Phe Asp Asp Thr Leu Val Ala
100 105 110
Ile Asp Thr Tyr Asn Cys Asp Leu His Phe Lys Val Ala Arg Asp Arg
115 120 125
Ser Ser Gly Tyr Pro Leu Thr Ile Glu Gly Phe Ala Tyr Leu Trp Ser
130 135 140
Gly Ala Arg Ala Ser Tyr Gly Val Arg Arg Gly Arg Val Cys Phe Glu
145 150 155 160
Met Lys Ile Asn Glu Glu Ile Ser Val Lys His Leu Pro Ser Thr Glu
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Thr Gln Leu Gly Glu Glu Pro Phe Ser Tyr Gly Tyr Gly Gly Thr Gly

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Val Glu Leu Ser Phe Thr Lys Asn Gly Lys Trp Met Gly Ile Ala Phe
                245                 250                 255
Arg Ile Gln Lys Glu Ala Leu Gly Gly Gln Ala Leu Tyr Pro His Val
            260                 265                 270
Leu Val Lys Asn Cys Ala Val Glu Phe Asn Phe Gly Gln Arg Ala Glu
        275                 280                 285
Pro Tyr Cys Ser Val Leu Pro Gly Phe Thr Phe Ile Gln His Leu Pro
    290                 295                 300
Leu Ser Glu Arg Ile Arg Gly Thr Val Gly Pro Lys Ser Lys Ala Glu
305                 310                 315                 320
Cys Glu Ile Leu Met Met Val Gly Leu Pro Ala Ala Gly Lys Thr Thr
                325                 330                 335
Trp Ala Ile Lys His Ala Ala Ser Asn Pro Ser Lys Lys Tyr Asn Ile
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Leu Gly Thr Asn Ala Ile Met Asp Lys Met Arg Val Met Gly Leu Arg
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Arg Gln Arg Asn Tyr Ala Gly Arg Trp Asp Val Leu Ile Gln Gln Ala
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Asn Tyr Ile Leu Asp Gln Thr Asn Val Tyr Gly Ser Ala Gln Arg Arg
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Lys Met Arg Pro Phe Glu Gly Phe Gln Arg Lys Ala Ile Val Ile Cys
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Pro Thr Asp Glu Asp Leu Lys Asp Arg Thr Ile Lys Arg Thr Asp Glu
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Glu Gly Lys Asp Val Pro Asp His Ala Val Leu Glu Met Lys Ala Asn
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Phe Thr Leu Pro Asp Val Gly Asp Phe Leu Asp Glu Val Leu Phe Ile
465                 470                 475                 480
Glu Leu Gln Arg Glu Glu Ala Asp Lys Leu Val Arg Gln Tyr Asn Gly
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Glu Gly Arg Lys Ala Gly Pro Pro Pro Glu Lys Arg Phe Asp Asn Arg
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Gly Gly Gly Gly Phe Arg Gly Arg Gly Gly Gly Gly Gly Phe Gln Arg
        515                 520                 525
Tyr Glu Asn Arg Gly Pro Pro Gly Gly Asn Arg Gly Gly Phe Gln Asn
    530                 535                 540
Arg Gly Gly Gly Ser Gly Gly Gly Gly Asn Tyr Arg Gly Gly Phe Asn
545                 550                 555                 560
Arg Ser Gly Gly Gly Gly Tyr Ser Gln Asn Arg Trp Gly Asn Asn Asn
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Gly Ala Ser Thr Tyr Asn Lys Asn Ser Asn Ile Pro Gly Ser Ser Ala
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Asn Thr Ser Thr Pro Thr Val Ser Ser Tyr Ser Pro Pro Gln Pro Ser
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Tyr Ser Gln Pro Pro Tyr Asn Gln Gly Gly Tyr Ser Gln Gly Tyr Thr
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Ala Pro Pro Pro Pro Pro Pro Pro Pro Pro Ala Tyr Asn Tyr Gly Ser
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Tyr Gly Gly Tyr Asn Pro Ala Pro Tyr Thr Pro Pro Pro Pro Pro Thr
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Ala Gln Thr Tyr Pro Gln Pro Ser Tyr Asn Gln Tyr Gln Gln Tyr Ala
705                 710                 715                 720
Gln Gln Trp Asn Arg Tyr Tyr Gln Asn Gln Gly Gln Trp Pro Pro Tyr
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<212> DNA
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<400> 17414

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<212> PRT
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Glu Ser Gln Arg Val Gly Asp His Ser Thr Gly Thr Val Pro Glu Asn
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His Ser His Leu Val Cys Leu Pro Ala Glu Trp Arg Thr Ser Cys Met
        115                 120                 125
Pro Ser Ser Lys Met Lys Glu Met Ser Ser Leu Phe Pro Glu Asp Trp
    130                 135                 140
Tyr Gln Phe Val Leu Arg Gln Leu Glu Cys Tyr His Ser Glu Glu Lys
145                 150                 155                 160
Ala Ser Asn Val Leu Glu Glu Ile Ala Lys Asp Lys Val Leu Lys Asp
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Phe Tyr Val His Thr Val Met Thr Cys Tyr Phe Ser Leu Phe Gly Ile
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Asp Asn Met Ala Pro Ser Pro Gly His Ile Leu Arg Val Tyr Gly Gly
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Val Leu Pro Trp Ser Val Ala Leu Asp Trp Leu Thr Glu Lys Pro Glu
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Leu Phe Gln Leu Ala Leu Lys Ala Phe Arg Tyr Thr Leu Lys Leu Met
225                 230                 235                 240
Ile Asp Lys Ala Ser Leu Gly Pro Ile Glu Asp Phe Arg Glu Leu Ile
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Lys Tyr Leu Glu Glu Tyr Glu Arg Asp Trp Tyr Ile Gly Leu Val Ser
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Arg Ala Ala Leu Cys Ala Gly Cys Gly Gly Lys Ile Ser Asp Arg Tyr

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Asp Gly Ser Ser Tyr Cys Lys Glu Asp Tyr Tyr Arg Arg Phe Ser Val
            100                 105                 110
Gln Arg Cys Ala Arg Cys His Leu Gly Ile Ser Ala Ser Glu Met Val
        115                 120                 125
Met Arg Ala Arg Asp Leu Val Tyr His Leu Asn Cys Phe Thr Cys Thr
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Thr Cys Asn Lys Met Leu Thr Thr Gly Asp His Phe Gly Met Lys Asp
145                 150                 155                 160
Ser Leu Val Tyr Cys Arg Leu His Phe Glu Ala Leu Leu Gln Gly Glu
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Tyr Pro Ala His Phe Asn His Ala Asp Val Ala Ala Ala Ala Ala Ala
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Ala Ala Ala Ala Lys Ser Ala Gly Leu Gly Ala Ala Gly Ala Asn Pro
        195                 200                 205
Leu Gly Leu Pro Tyr Tyr Asn Gly Val Gly Thr Val Gln Lys Gly Arg
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Pro Arg Lys Arg Lys Ser Pro Gly Pro Gly Ala Asp Leu Ala Ala Tyr
225                 230                 235                 240
Asn Ala Ala Leu Ser Cys Asn Glu Asn Asp Ala Glu His Leu Asp Arg
                245                 250                 255
Asp Gln Pro Tyr Pro Ser Ser Gln Lys Thr Lys Arg Met Arg Thr Ser
            260                 265                 270
Phe Lys His His Gln Leu Arg Thr Met Lys Ser Tyr Phe Ala Ile Asn
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His Asn Pro Asp Ala Lys Asp Leu Lys Gln Leu Ala Gln Lys Thr Gly
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Leu Thr Lys Arg Val Leu Gln Val Trp Phe Gln Asn Ala Arg Ala Lys
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Thr Asp Ala Ala Leu Gln Thr Gly Thr Pro Ser Gly Pro Ala Ser Glu
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Leu Ser Asn Ala Ser Leu Ser Pro Ser Ser Thr Pro Thr Thr Leu Thr
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Asp Leu Thr Ser Pro Thr Leu Pro Thr Val Thr Ser Val Leu Thr Ser
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<212> DNA
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<210> 17419
<211> 591
<212> PRT
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<400> 17419

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         35                  40                  45
Lys Glu Ser Phe Arg Ala Phe Val Glu Asp Ser Glu Asp Glu Asp Gly
     50                  55                  60
Ala Gly Glu Gly Gly Ser Ser Leu Leu Gln Lys Arg Ala Lys Thr Arg
 65                  70                  75                  80
Gln Glu Lys Ala Gln Glu Glu Ala Asp Tyr Ile Glu Trp Leu Lys Gly
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Gln Lys Glu Ile Arg Asn Pro Asp Ser Leu Lys Glu Leu Thr His Leu
            100                 105                 110
Lys Glu Tyr Trp Asn Asp Pro Glu Leu Asp Glu Gly Glu Arg Phe Leu
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Arg Asp Tyr Ile Leu Asn Lys Arg Tyr Glu Glu Gly Glu Glu Glu Glu
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Glu Asp Glu Glu Glu Met Glu Glu Glu Lys Gly Val His Gly Pro Pro
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Val Gln Leu Ala Val Asp Gly Ser Ser Asp Glu Gly Glu Leu Phe Leu
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Lys Lys Gln Glu Asp Phe Glu Gln Lys Tyr Asn Phe Arg Phe Glu Glu
            180                 185                 190
Pro Asp Ser Ala Ser Val Lys Thr Tyr Pro Arg Ser Ile Ala Ser Ser
        195                 200                 205
Val Arg Arg Lys Asp Glu Arg Arg Lys Glu Lys Arg Glu Glu Thr Arg
    210                 215                 220
Glu Arg Lys Lys Arg Glu Lys Ala Lys Lys Gln Glu Glu Leu Lys Gln
225                 230                 235                 240
Leu Lys Asn Leu Lys Arg Lys Glu Ile Leu Ala Lys Leu Glu Lys Leu
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Arg Lys Val Thr Gly Asn Glu Met Leu Gly Leu Glu Glu Gly Asp Leu
            260                 265                 270
Glu Asp Asp Phe Asp Pro Ala Gln His Asp Gln Leu Met Gln Lys Cys
        275                 280                 285
Phe Gly Asp Glu Tyr Tyr Gly Ala Val Glu Glu Glu Lys Pro Gln Phe
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Glu Glu Glu Glu Glu Gly Leu Glu Asp Asp Trp Asn Trp Asp Thr Trp Asp
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Asp Lys Thr Phe Glu Glu Tyr Leu Asp Glu Tyr Tyr Arg Leu Asp Tyr
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Glu Asp Ile Ile Asp Asp Leu Pro Cys Arg Phe Lys Tyr Arg Thr Val
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Val Pro Cys Asp Phe Gly Leu Ser Thr Glu Glu Ile Leu Ala Ala Asp
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Asp Lys Glu Leu Asn Arg Trp Cys Ser Leu Lys Lys Thr Cys Met Tyr
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His Lys Lys Pro Ala Pro Gln Lys Arg Arg Arg Ala Lys Lys Ala Arg
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Arg Leu Gln Ala Phe Gly Leu Asn Pro Lys Arg Leu His Phe Arg Gln
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<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 17421

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			20					25				30			
His	Pro	Leu	Ser	Asn	Gln	Val	Val	Val	Tyr	Thr	Lys	Gly	Ala	Asp	Ser
		35					40					45			
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65					70					75					80
Asp	Tyr	Ala	Lys	Gln	Gly	Leu	Arg	Thr	Leu	Cys	Ile	Ala	Lys	Lys	Val
				85					90					95	
Met	Ser	Asp	Thr	Glu	Tyr	Ala	Glu	Trp	Leu	Arg	Asn	His	Phe	Leu	Ala
			100					105					110		
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Arg	Leu	Glu	Asn	Lys	Leu	Thr	Leu	Leu	Gly	Ala	Thr	Gly	Ile	Glu	Asp
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Arg	Leu	Gln	Glu	Gly	Val	Pro	Glu	Ser	Ile	Glu	Ala	Leu	His	Lys	Ala
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Gly	Ile	Lys	Ile	Trp	Met	Leu	Thr	Gly	Asp	Lys	Gln	Glu	Thr	Ala	Val
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        195                 200                 205
Ile Leu Lys Glu Leu Gln Lys Lys Thr Gln Ala Leu Pro Glu Gln Val
    210                 215                 220
Ser Leu Ser Glu Asp Leu Leu Gln Pro Pro Val Pro Arg Asp Ser Gly
225                 230                 235                 240
Leu Arg Ala Gly Leu Ile Ile Thr Gly Lys Thr Leu Glu Phe Ala Leu
                245                 250                 255
Gln Glu Ser Leu Gln Lys Gln Phe Leu Glu Leu Thr Ser Trp Cys Gln
            260                 265                 270
Ala Val Val Cys Cys Arg Ala Thr Pro Leu Gln Lys Ser Glu Val Val
        275                 280                 285
Lys Leu Val Arg Ser His Leu Gln Val Met Thr Leu Ala Ile Gly Asp
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Gly Ala Asn Asp Val Ser Met Ile Gln Val Ala Asp Ile Gly Ile Gly
305                 310                 315                 320
Val Ser Gly Gln Glu Gly Met Gln Ala Val Met Ala Ser Asp Phe Ala
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Val Ser Gln Phe Lys His Leu Ser Lys Leu Leu Leu Val His Gly His
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Asn Val Ala Tyr Val Asn Leu Leu Phe Trp Tyr Gln Phe Phe Cys Gly
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Asp Val Ser Ala Glu Thr Leu Met Gln Leu Pro Glu Leu Tyr Arg Ser
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Gly Gln Lys Ser Glu Ala Tyr Leu Pro His Thr Phe Trp Ile Thr Leu
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Leu Asp Ala Phe Tyr Gln Ser Leu Val Cys Phe Phe Val Pro Tyr Phe
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Thr Tyr Gln Gly Ser Asp Thr Asp Ile Phe Ala Phe Gly Asn Pro Leu
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Asn Thr Ala Ala Leu Phe Ile Val Leu Leu His Leu Val Ile Glu Ser
                485                 490                 495
Lys Ser Leu Thr Trp Ile His Leu Leu Val Ile Ile Gly Ser Ile Leu
            500                 505                 510
Ser Tyr Phe Leu Phe Ala Ile Val Phe Gly Ala Met Cys Val Thr Cys
        515                 520                 525
Asn Pro Pro Ser Asn Pro Tyr Trp Ile Met Gln Glu His Met Leu Asp
    530                 535                 540
Pro Val Phe Tyr Leu Val Cys Ile Leu Thr Thr Ser Ile Ala Leu Leu
545                 550                 555                 560
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Ile Leu Arg Ala Lys His Phe Asp Arg Leu Thr Pro Glu Glu Arg Thr
580 585 590
Lys Ala Leu Lys Lys Trp Arg Gly Ala Gly Lys Met Asn Gln Val Thr
595 600 605
Ser Lys Tyr Ala Asn Gln Ser Ala Gly Lys Ser Gly Arg Arg Pro Met
610 615 620
Pro Gly Pro Ser Ala Val Phe Ala Met Lys Ser Ala Ser Ser Cys Ala
625 630 635 640
Ile Glu Gln Gly Asn Leu Ser Leu Cys Glu Thr Ala Leu Asp Gln Gly
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Tyr Ser Glu Thr Lys Ala Phe Glu Met Ala Gly Pro Ser Lys Gly Lys
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Glu Ser

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<211> 3133
<212> DNA
<213> Homo sapiens

<220>
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<222> (113)..(1879)

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Val Leu Pro Ser Phe Gly Phe Thr Leu Asn Ser Glu Gly Cys Asn Arg
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Arg Pro Gly Gly Arg Arg His Ser Lys Gly Asn Pro Glu Ser Ser Leu
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Tyr Arg Leu Val Glu Thr Arg Gly Pro Leu Cys Ser Leu Arg Ser Glu
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Cys Ser Gly Lys Glu Arg Asp Arg Arg Thr Asp Asp Leu Leu Glu Leu
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35 40 45
Asp Leu Ala His Cys Gln Ser Asn Leu Val Glu Leu Ser Lys Leu Leu
50 55 60
Gln Asn Leu Glu Ile Leu Gln Arg Thr Gln Ser Ala Pro Asn Phe Thr
65 70 75 80
Asp Met Gln Ala Asn Cys Val Asp Ile Ser Lys Lys Asp Lys Arg Val
85 90 95
Thr Arg Arg Trp Arg Thr Lys Gly Val Ser Lys Asp Thr Lys Ile Gln
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Leu Gln Val Pro Phe Ser Ala Thr Met Ser Pro Val Arg Leu His Ser
115 120 125

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145 150 155 160
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165 170 175
Ala Phe Asn Ser Ile Ala Ile Glu Lys Glu Lys Leu Lys Gln Met Val
180 185 190
Ser Glu Gln Asp His Ser Lys Gly His Ser Thr Gln Met Ala Arg Leu
195 200 205
Arg Gln Ser Leu Ser Gln Ala Leu Asn Gln Asn Ala Glu Leu Arg Ser
210 215 220
Arg Leu Asn Arg Ile His Ser Glu Ser Ile Ile Cys Asp Gln Val Val
225 230 235 240
Ser Val Asn Ile Ile Pro Ser Pro Asp Glu Ala Gly Glu Gln Ile His
245 250 255
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260 265 270
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Pro Val Asp Ser Trp Lys Asn Gln Thr Phe Gln Asn Glu Ser Arg Thr
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Ser Ser Thr Phe Pro Ser Val Tyr Thr Ile Thr Ser Asn Asp Ile Ser
            180                 185                 190
Val Asn Thr Val Asp Glu Glu Asn Thr Val Met Val Ala Ser Ala Ser
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Val Ser Gln Ser Gln Leu Pro Gly Thr Ala Asn Ser Val Pro Glu Cys
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Tyr Tyr Glu Ser Glu Ile Asn Ser Leu Lys Gln Lys Leu Glu Ala Lys
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Gln Lys Val Glu His Leu Ala Gly Arg Val Val Leu Gln Val Ala Cys
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<400> 17441

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<213> Homo sapiens

<400> 17446

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Trp Gly Ser Arg Arg Arg Trp Val Thr Pro Ala Gly Arg Pro Asp Phe
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Asp His Leu Leu Arg Thr Tyr Gly Asp Val Val Val Pro Val Ala Asn
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Cys Gly Val Gln Glu Tyr Asn Ser Asn Pro Lys Glu His Met Thr Leu
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Arg Asp Tyr Ile Thr Tyr Trp Lys Glu Tyr Ile Gln Ala Gly Tyr Ser
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Ser Pro Arg Gly Cys Leu Tyr Leu Lys Asp Trp His Leu Cys Arg Asp
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Phe Pro Val Glu Asp Val Phe Thr Leu Pro Val Tyr Phe Ser Ser Asp
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Trp Leu Asn Glu Phe Trp Asp Ala Leu Asp Val Asp Asp Tyr Arg Phe
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Val Tyr Ala Gly Pro Ala Gly Ser Trp Ser Pro Phe His Ala Asp Ile
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Phe Arg Ser Phe Ser Arg Ser Val Asn Val Cys Gly Arg Lys Lys Trp
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Leu Leu Phe Pro Pro Gly Gln Glu Glu Ala Leu Arg Asp Arg His Gly
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Asn Leu Pro Tyr Asp Val Thr Ser Pro Ala Leu Cys Asp Thr His Leu
225                 230                 235                 240
His Pro Arg Asn Gln Leu Ala Gly Pro Pro Leu Glu Ile Thr Gln Glu
                245                 250                 255
Ala Gly Glu Met Val Phe Val Pro Ser Gly Trp His His Gln Val His
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Asn Leu Asp Asp Thr Ile Ser Ile Asn His Asn Trp Val Asn Gly Phe
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Asn Leu Ala Asn Met Trp Arg Phe Leu Gln Gln Glu Leu Cys Ala Val
    290                 295                 300
Gln Glu Glu Val Ile Met Arg Ser Cys Ser Gly Ile Asn Phe Glu Glu
305                 310                 315                 320
Phe Tyr His Phe Leu Lys Val Ile Ala Glu Lys Arg Leu Leu Val Leu
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Arg Glu Ala Ala Ala Glu Asp Gly Ala Gly Leu Gly Phe Glu Gln Ala
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0960260 - 0960800

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0960294.0002

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<212> PRT
<213> Homo sapiens

<400> 17448

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Lys Thr Gln Ala Glu Ala Val Ala Glu Ala Glu Leu Lys Thr Glu Ser
         35                  40                  45
Val Thr Gln Ala Lys Ala Gly Asp Gly Ala Met Thr Arg Thr His Thr
     50                  55                  60
Val Thr Tyr Arg Glu Ala Met Ala Val Thr Arg Glu Val Ile Lys Val
 65                  70                  75                  80
Glu Asp Thr Thr Lys Thr Arg Val Met Val Glu Thr Lys Thr Lys Pro
                 85                  90                  95
Leu Ala Glu Arg Ser Ile Val Pro Gln Thr Lys Ser Lys Ala Met Pro
            100                 105                 110
Met Ser Arg Val Ser Thr Val Thr Lys Ser Glu Val Lys Val Val Ala
        115                 120                 125
Val Ile Glu Ala Asn Ile Arg Ser Tyr Ala Lys Ser His Asp Lys Ala
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Asn Thr Gly Ser Arg Pro Asp Arg Arg Glu Glu Thr Ser Ile Gly Met
145                 150                 155                 160
Lys Ser Ser Asp Glu Asp Glu Glu Asn Ile Cys Ser Trp Phe Trp Thr
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Gly Glu Glu Pro Ser Val Gly Ser Trp Phe Trp Pro Glu Glu Glu Thr
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225 230 235 240
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245 250 255
Thr Pro Leu Gly Ile Arg Pro Leu Thr Lys Ile Pro Pro Tyr His Gly
260 265 270
Pro Tyr Tyr Gln Thr Leu Ala Glu Ile Lys Lys Gln Ile Arg Gln Arg
275 280 285
Glu Lys Tyr Gly Pro Asn Pro Lys Ala Cys His Cys Lys Ser Arg Gly
290 295 300
Phe Ser Leu Glu Pro Lys Glu Phe Asp Lys Leu Val Ala Leu Leu Lys
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Leu Thr Lys Asp Pro Phe Ile His Glu Ile Ala Thr Met Ile Met Gly
325 330 335
Val Ser Pro Ala Tyr Pro Phe Thr Gln Asp Ile Ile His Asp Val Gly
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His Pro Gly Ala Leu Ser Met Val Asp Asp Ser Ser Glu Ser Ser Glu
370 375 380
Glu Pro Lys Ser Gly Glu Ser Tyr Ile His Gln Val Cys Lys Gly Ile
385 390 395 400
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Pro Phe Asn Lys Asn Glu Ser Lys Ala Asn Ile Leu Asn Ile Ile Glu
485 490 495
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515 520 525
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<211> 2336
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09/02/2008 09:50:49

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<222> (254)..(1159)

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<400> 17451

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<213> Homo sapiens

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35 40 45
Ser Phe Leu Gly Phe Thr Ser Phe Thr Met Gly Asn Leu Pro Pro Ser
50 55 60
Ile Pro Pro Ser Ser Pro Leu Ala Cys Val Leu Lys Asn Leu Lys Pro
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<222> (41)..(775)

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<212> PRT
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35 40 45
Leu Arg Glu Asn Ala Val Glu Arg Leu Asp Ser Leu Ile Gln Ala Thr
50 55 60
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65 70 75 80
Trp Leu Glu Ile Ile Arg Val Asp Ala Pro Asp Pro Gly Ala Asp Pro
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Leu Ala Ser Ser Val Asn Gly Met Cys Leu Asp Ile Pro Ala His Leu
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115 120 125
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130 135 140
Gln Tyr Gln Cys Gly Leu Thr Cys Glu His Lys Ala Asp Leu Leu Pro
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<212> DNA
<213> Homo sapiens

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<222> (1838)..(2173)

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<212> PRT
<213> Homo sapiens

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DOCKET NO. 9460/2800

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<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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0000270-0000450

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Ala Ile Ala Glu Ser Leu Asn Ser Cys Arg Pro Ser Asp Ala Ser Ala
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    130                 135                 140
Glu Lys Thr Thr Asp Ser Gly Leu Thr Glu Gly Ile Trp Gln Leu Val
145                 150                 155                 160
Pro Pro Ser Leu Phe Lys Gly Ser His Ile Ser Gln Gly Asn Glu Ala
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Glu Glu Arg Glu Glu Pro Trp Asp His Thr Glu Lys Thr Glu Glu Gly
            180                 185                 190
Pro Val Ser Gly Ser Ser Gly Ser Trp Asp Gln Ser Ser Gln Pro Val
        195                 200                 205
Phe Glu Asn Val Asn Val Lys Ser Phe Asp Arg Cys Thr Gly His Ser
    210                 215                 220
Ala Glu His Thr Gln Cys Gly Lys Pro Gln Glu Ser Thr Gly Arg Gly
225                 230                 235                 240
Ser Ala Phe Leu Lys Ala Val Gln Gly Ser Gly Asp Thr Ser Arg His
                245                 250                 255
Cys Leu Pro Thr Leu Ala Asp Ala Lys Gly Leu Gln Asp Thr Gly Gly
            260                 265                 270
Thr Val Asn Tyr Phe Trp Gly Ile Pro Phe Cys Pro Asp Gly Val Asp
        275                 280                 285
Pro Asn Gln Tyr Thr Lys Val Ile Leu Cys Gln Leu Glu Val Tyr Gln
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Lys Ser Leu Lys Met Ala Gln Arg Gln Leu Leu Asn Lys Lys Gly Phe
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Gly Gln Gly Glu Gln Ala Ser Glu Lys Asn Glu Cys Ile Ser Glu Asp
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Lys Glu Lys Leu Leu Leu Glu Glu Glu Pro Thr Thr Ser His Gly Gln
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Glu Val Gly Asn Lys Glu Asp Ala Glu Lys Glu Val Ala Ile Ser Thr
                485                 490                 495
Phe Ser Ser Ser Asn Gln Val Ser Cys Pro Leu Cys Asp Gln Cys Phe
            500                 505                 510
Pro Pro Thr Lys Ile Glu Arg His Ala Met Tyr Cys Asn Gly Leu Met
        515                 520                 525
Glu Glu Asp Thr Val Leu Thr Arg Arg Gln Lys Glu Ala Lys Thr Lys
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Ser Asp Ser Gly Thr Ala Ala Gln Thr Ser Leu Asp Ile Asp Lys Asn
545                 550                 555                 560
Glu Lys Cys Tyr Leu Cys Lys Ser Leu Val Pro Phe Arg Glu Tyr Gln
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Cys His Val Asp Ser Cys Leu Gln Leu Ala Lys Ala Asp Gln Gly Asp
            580                 585                 590
Gly Pro Glu Gly Ser Gly Arg Ala Cys Ser Thr Val Glu Gly Lys Trp
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Gln Gln Arg Leu Lys Asn Pro Lys Glu Lys Gly His Ser Glu Gly Arg
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Ile Lys Ser Ser Glu Thr Gly Ala Phe Arg Val Pro Ser Pro Gly Met
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Glu Glu Ala Gly Cys Ser Arg Glu Met Gln Ser Ser Phe Thr Arg Arg
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Asp Leu Asn Glu Ser Pro Val Lys Ser Phe Val Ser Ile Ser Glu Ala
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<213> Homo sapiens

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<400> 17464

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Ala Val Ile Arg Thr Ser Gly Pro Ala Ser Gly His Ala Leu Arg Ile
    50                  55                  60
Leu Thr Ala Pro Arg Asp Leu Pro Leu Ala Arg His Ala Ser Leu Arg
65                  70                  75                  80
Leu Leu Ser Asp Pro Arg Ser Gly Glu Pro Leu Asp Arg Ala Leu Val
                85                  90                  95
Leu Trp Phe Pro Gly Pro Gln Ser Phe Thr Gly Glu Asp Cys Val Glu
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Phe His Val His Gly Gly Pro Ala Val Val Ser Gly Val Leu Gln Ala
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145                 150                 155                 160
Leu Ala Asp Leu Ile His Ala Glu Thr Glu Ala Gln Arg Arg Gln Ala
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Leu Arg Gln Leu Asp Gly Glu Leu Gly His Leu Cys Arg Gly Trp Ala
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Glu Thr Leu Thr Lys Ala Leu Ala His Val Glu Ala Tyr Ile Asp Phe
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Gly Glu Asp Asp Asn Leu Glu Glu Gly Val Leu Glu Gln Ala Asp Ile
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Glu Val Arg Ala Leu Gln Val Ala Leu Gly Ala His Leu Arg Asp Ala
225                 230                 235                 240
Arg Arg Gly Gln Arg Leu Arg Ser Gly Ala His Val Val Val Thr Gly
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Pro Val Ser Ile Val Ser Pro Glu Pro Gly Thr Thr Arg Asp Val Leu
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Glu Thr Pro Val Asp Leu Ala Gly Phe Pro Val Leu Leu Ser Asp Thr
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Ala Gly Leu Arg Glu Gly Val Gly Pro Val Glu Gln Glu Gly Val Arg
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Val Val Ala Ser Val Gly Ala Gln Ser Pro Ser Asp Ser Ser Gln Arg
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Arg His Gln His His Leu Gln Gly Cys Leu Asp Ala Leu Gly His Tyr
435 440 445
Lys Gln Ser Lys Asp Leu Ala Leu Ala Ala Glu Ala Leu Arg Val Ala
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Arg Lys Leu Thr Gly Gly Ala Asp Lys Gly Lys Phe Val Ala Leu Glu
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Pro Asn Gly Ile Cys Thr Lys Cys Gln Pro Ser Ala Ile Thr Leu Asn
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Gly Asp Phe Gln Asn Lys His Pro Asn Met Cys Arg Leu Ser Pro Asp
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Gly His Phe Gly Ser Lys Phe Val Thr Ala Val Ala Thr Gly Gly Pro
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Pro Val Arg Arg Gln Gly Asn Tyr Leu Leu Cys Ser Leu Leu Leu Gly
65                  70                  75                  80
Asn Val Leu Val Asn Thr Thr Leu Thr Ile Leu Leu Asp Asp Ile Ala
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Thr Pro Leu Arg Asp Cys Phe Met Ile Thr Gly Glu Ala Ile Leu Asp
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0062946.0280

<211> 383
<212> PRT
<213> Homo sapiens

<400> 17471

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Leu Met Pro Ser Phe Ile Arg His Gly Pro Thr Ile Pro Arg Arg Thr
         35                  40                  45
Asp Ile Cys Leu Pro Asp Ser Ser Pro Asn Ala Phe Ser Thr Ser Gly
     50                  55                  60
Asp Val Val Ser Arg Asn Gln Ser Phe Leu Arg Thr Pro Ile Gln Arg
 65                  70                  75                  80
Thr Pro His Glu Ile Met Arg Arg Glu Ser Asn Arg Leu Ser Ala Pro
                 85                  90                  95
Ser Tyr Leu Ala Arg Ser Leu Ala Asp Val Pro Arg Glu Tyr Gly Ser
            100                 105                 110
Ser Gln Ser Phe Val Thr Glu Val Ser Phe Ala Val Glu Asn Gly Asp
        115                 120                 125
Ser Gly Ser Arg Tyr Tyr Tyr Ser Asp Asn Phe Phe Asp Gly Gln Arg
    130                 135                 140
Lys Arg Pro Leu Gly Asp Arg Ala His Glu Asp Tyr Arg Tyr Tyr Glu
145                 150                 155                 160
Tyr Asn His Asp Leu Phe Gln Arg Met Pro Gln Asn Gln Gly Arg His
                165                 170                 175
Ala Ser Gly Ile Gly Arg Val Ala Ala Thr Ser Leu Gly Asn Leu Thr
            180                 185                 190
Asn His Gly Ser Glu Asp Leu Pro Leu Pro Pro Gly Trp Ser Val Asp
        195                 200                 205
Trp Thr Met Arg Gly Arg Lys Tyr Tyr Ile Asp His Asn Thr Asn Thr
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Thr His Trp Ser His Pro Leu Glu Arg Glu Gly Leu Pro Pro Gly Trp
225                 230                 235                 240
Glu Arg Val Glu Ser Ser Glu Phe Gly Thr Tyr Tyr Val Asp His Thr
                245                 250                 255
Asn Lys Lys Ala Gln Tyr Arg His Pro Cys Ala Pro Ser Val Pro Arg
            260                 265                 270
Tyr Asp Gln Pro Pro Pro Val Thr Tyr Gln Pro Gln Gln Thr Glu Arg
        275                 280                 285
Asn Gln Ser Leu Leu Val Pro Ala Asn Pro Tyr His Thr Ala Glu Ile
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Pro Asp Trp Leu Gln Val Tyr Ala Arg Ala Pro Val Lys Tyr Asp His
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Gly Met Leu Lys Leu Leu Phe Met Lys Glu Leu Glu Gln Ile Val Lys
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<210> 17472
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (897)..(2189)

<400> 17472

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<210> 17473
<211> 431
<212> PRT
<213> Homo sapiens

<400> 17473

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Pro Gln Pro Pro Phe Gln Ala Ala Thr His Leu Glu Gly Asp Tyr Gln
         35                  40                  45
Arg Ser Ala Cys Ser Leu Gln Ser Leu Gly Asn Ala Ala Pro His Ala
     50                  55                  60
Lys Ser Lys Glu Leu Asn Gly Ser Cys Met Arg Pro Gly Leu Ala Pro
 65                  70                  75                  80
Glu Pro Leu Ser Ala Pro Pro Gly Ser Pro Pro Pro Ser Ala Ala Pro
                 85                  90                  95
Thr Ser Ala Thr Ser Asn Ser Ser Asn Gly Gly Gly Pro Ser Lys Ser
            100                 105                 110
Gly Pro Pro Lys Cys Gly Pro Gly Thr Asn Ser Thr Leu Thr Lys Gln
        115                 120                 125
Ile Phe Pro Trp Met Lys Glu Ser Arg Gln Thr Ser Lys Leu Lys Asn
    130                 135                 140
Asn Ser Pro Gly Thr Ala Glu Gly Cys Gly Gly Gly Gly Gly Gly Gly
145                 150                 155                 160
Gly Gly Gly Gly Ser Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Glu
                165                 170                 175
Gly Gly Asp Lys Ser Pro Pro Gly Ser Ala Ala Ser Glu Arg Ala Arg
            180                 185                 190
Thr Ala Tyr Thr Ser Ala Gln Leu Val Glu Leu Glu Lys Glu Phe His
        195                 200                 205
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Phe Asn Arg Tyr Leu Cys Arg Pro Arg Arg Val Glu Met Ala Asn Leu
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225 230 235 240
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245 250 255
Gly Gly Pro Ser Pro Ala Gly Ser Pro Pro Gln Pro Met Gln Ser Thr
260 265 270
Ala Gly Phe Met Asn Ala Leu His Ser Met Thr Pro Ser Tyr Glu Ser
275 280 285
Pro Ser Pro Pro Ala Phe Gly Lys Ala His Gln Asn Ala Tyr Ala Leu
290 295 300
Pro Ser Asn Tyr Gln Pro Pro Leu Lys Gly Cys Gly Ala Pro Gln Lys
305 310 315 320
Tyr Pro Pro Thr Pro Ala Pro Glu Tyr Glu Pro His Val Leu Gln Ala
325 330 335
Asn Gly Gly Ala Tyr Gly Thr Pro Thr Met Gln Gly Ser Pro Val Tyr
340 345 350
Val Gly Gly Gly Gly Tyr Ala Asp Pro Leu Pro Pro Pro Ala Gly Pro
355 360 365
Ser Leu Tyr Gly Leu Asn His Leu Ser His His Pro Ser Gly Asn Leu
370 375 380
Asp Tyr Asn Gly Ala Pro Pro Met Ala Pro Ser Gln His His Gly Pro
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Cys Glu Pro His Pro Thr Tyr Thr Asp Leu Ser Ser His His Ala Pro
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<210> 17474
<211> 2148
<212> DNA
<213> Homo sapiens

<400> 17474
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<211> 2405
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (198)..(1160)

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<210> 17476
<211> 321
<212> PRT
<213> Homo sapiens

<400> 17476
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35 40 45
Ala Pro Glu Pro Arg Ala Val Ala Thr Asn Gly Leu Arg Asp Arg Thr
50 55 60
His Arg Leu Gln Pro Val Pro Val Pro Val Pro Val Pro Val Pro Val
65 70 75 80
Ala Pro Ala Val Pro Pro Arg Gly Gly Thr Asp Thr Ala Gly Glu Arg

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Ala Leu Gly Ala Val Gly Pro Gly Leu Pro Thr Pro Pro Pro Pro Pro
        115                 120                 125
Pro Pro Ala Pro Gln Ser Gln Ala Pro Gly Gly Pro Glu Ala Gln Pro
    130                 135                 140
Phe Arg Glu Pro Gly Pro Arg Pro Arg Ile Leu Leu Cys Ala Pro Pro
145                 150                 155                 160
Ala Arg Pro Ala Pro Ser Ala Pro Pro Ala Pro Pro Ala Pro Pro Glu
                165                 170                 175
Ser Thr Val Arg Pro Ala Pro Pro Thr Arg Pro Gly Glu Ser Ser Tyr
            180                 185                 190
Ser Ser Ile Ser His Val Ile Tyr Asn Asn His Gln Asp Ser Ser Ala
        195                 200                 205
Ser Pro Arg Lys Arg Pro Gly Glu Ala Thr Ala Ala Ser Ser Glu Ile
    210                 215                 220
Lys Ala Leu Gln Gln Thr Arg Arg Leu Leu Ala Asn Ala Arg Glu Arg
225                 230                 235                 240
Thr Arg Val His Thr Ile Ser Ala Ala Phe Glu Ala Leu Arg Lys Gln
                245                 250                 255
Val Pro Cys Tyr Ser Tyr Gly Gln Lys Leu Ser Lys Leu Ala Ile Leu
            260                 265                 270
Arg Ile Ala Cys Asn Tyr Ile Leu Ser Leu Ala Arg Leu Ala Asp Leu
        275                 280                 285
Asp Tyr Ser Ala Asp His Ser Asn Leu Ser Phe Ser Glu Cys Val Gln
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<210> 17477
<211> 2534
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (84)..(1550)

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<212> PRT
<213> Homo sapiens

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Ala Ala Ser Pro Pro Gly Thr Val Lys Ala Glu Glu His Gln Arg Gln
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Ala Ala Arg Gly Gly Glu Asp Thr Asn Asp Leu Gln Gln Lys Leu Glu
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Ala Gln Thr Ala Ala Ala Glu Ala Pro
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<222> (88)..(1443)

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<400> 17481

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Leu	Gly	Pro	Phe	Phe	Asp	Phe	Ile	Val	Ser	Ile	Asn	Gly	Ser	Arg	Leu
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Glu	Thr	Ser	Val	Thr	Pro	Ser	Asn	Leu	Trp	Gly	Gly	Gln	Gly	Leu	Leu
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Gly Ile Gly Tyr Gly Tyr Leu His Arg Ile Pro Thr Arg Pro Phe Glu
        195                 200                 205
Glu Gly Lys Lys Ile Ser Leu Pro Gly Gln Met Ala Gly Thr Pro Ile
    210                 215                 220
Thr Pro Leu Lys Asp Gly Phe Thr Glu Val Gln Leu Ser Ser Val Asn
225                 230                 235                 240
Pro Pro Ser Leu Ser Pro Pro Gly Thr Thr Gly Ile Glu Gln Ser Leu
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Thr Gly Leu Ser Ile Ser Ser Thr Pro Pro Ala Val Ser Ser Val Leu
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Ser Thr Gly Val Pro Thr Val Pro Leu Leu Pro Pro Gln Val Asn Gln
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Ser Leu Thr Ser Val Pro Pro Met Asn Pro Thr Thr Thr Leu Pro Gly
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Asn Leu Pro Ala Pro His Ile Met Pro Gly Val Gly Leu Pro Glu Leu
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Val Asn Pro Gly Leu Pro Pro Leu Pro Ser Met Pro Pro Arg Asn Leu
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Pro Gly Ile Ala Pro Leu Pro Leu Pro Ser Glu Phe Leu Pro Ser Phe
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Pro Leu Val Pro Glu Ser Ser Ser Ala Ala Ser Ser Gly Glu Leu Leu
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Ser Ser Leu Pro Pro Thr Ser Asn Ala Pro Ser Asp Pro Ala Thr Thr
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<212> DNA
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<222> (178)..(1599)

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<400> 17482

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Glu Asp Phe Gly Asp Thr Lys Arg Ile Glu Val Met Val Gly Met Gly
     50                  55                  60
Tyr Thr Arg Glu Glu Ile Lys Glu Ser Leu Thr Ser Gln Lys Tyr Asn
 65                  70                  75                  80
Glu Val Thr Ala Thr Tyr Leu Leu Leu Gly Arg Lys Thr Glu Glu Gly
                 85                  90                  95
Gly Asp Arg Gly Ala Pro Gly Leu Ala Leu Ala Arg Val Arg Ala Pro
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Ser Asp Thr Thr Asn Gly Thr Ser Ser Ser Lys Gly Thr Ser His Ser
        115                 120                 125
Lys Gly Gln Arg Ser Ser Ser Ser Thr Tyr His Arg Gln Arg Arg His
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Ser Asp Phe Cys Gly Pro Ser Pro Ala Pro Leu His Pro Lys Arg Ser
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Pro Thr Ser Thr Gly Glu Ala Glu Leu Lys Glu Glu Arg Leu Pro Gly
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Arg Lys Ala Ser Cys Ser Thr Ala Gly Ser Gly Ser Arg Gly Leu Pro
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Ile Pro Glu Arg Arg Lys Asp Ser Thr Ser Thr Pro Asn Asn Leu Pro
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Pro Ser Met Met Thr Arg Arg Asn Thr Tyr Val Cys Thr Glu Arg Leu
225                 230                 235                 240
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                245                 250                 255
Gly Thr Pro Arg Val Pro Pro Ala Ser Pro Ser Ser His Ser Leu Ala
            260                 265                 270
Pro Pro Ser Gly Glu Arg Ser Arg Leu Ala Arg Gly Ser Thr Ile Arg
        275                 280                 285
Ser Thr Phe His Gly Gly Gln Val Arg Asp Arg Arg Ala Gly Gly Gly
    290                 295                 300
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Gln Ala Thr Ala Ala Ala Arg Cys Arg Cys Arg Gln Pro Gln Pro Phe
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<212> PRT
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His Pro Pro Phe Lys Gln Asp Val Ser Pro Ile Glu Arg Asn Glu Gln
50 55 60
Leu Trp Ile Met Thr Thr Ala Thr Arg Arg Gln Gly Asn Leu Gly Glu
65 70 75 80
Lys Asn Gln Ser Lys Leu Ile Thr Val Gln Asp Arg Glu Ser Glu Glu
85 90 95
Glu Leu Ser Cys Trp Gln Ile Trp Gln Gln Ile Ala Asn Asp Leu Thr
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Arg Cys Gln Asp Ser Met Ile Asn Asn Ser Gln Cys His Lys Gln Gly
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Asp Phe Pro Tyr Gln Val Gly Thr Glu Leu Ser Ile Gln Ile Ser Glu
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0505050-050800

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Phe Leu Thr Glu Ser Gln Arg Leu Asn Arg Asp Gln Gln Ile Ser Ile
            180                 185                 190
Lys Asn Lys Leu Cys Gln Cys Lys Lys Gly Val Asp Pro Ile Gly Trp
        195                 200                 205
Ile Ser His His Asp Gly His Arg Val His Lys Ser Glu Lys Ser Tyr
    210                 215                 220
Arg Pro Asn Asp Tyr Glu Lys Asp Asn Met Lys Ile Leu Thr Phe Asp
225                 230                 235                 240
His Asn Ser Met Ile His Thr Gly Gln Lys Ser Tyr Gln Cys Asn Glu
                245                 250                 255
Cys Lys Lys Pro Phe Ser Asp Leu Ser Ser Phe Asp Leu His Gln Gln
            260                 265                 270
Leu Gln Ser Gly Glu Lys Ser Leu Thr Cys Val Glu Arg Gly Lys Gly
        275                 280                 285
Phe Cys Tyr Ser Pro Val Leu Pro Val His Gln Lys Val His Val Gly
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His Leu Gln Thr His Gln Lys Val His Val Ile Glu Lys Pro Tyr Lys
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His Cys Lys Val His Thr Ala Glu Lys Pro Tyr Asn Cys Glu Glu Cys
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Gly Arg Ala Phe Ser Gln Ala Ser His Leu Gln Asp His Gln Arg Leu
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His Thr Gly Glu Lys Pro Phe Lys Cys Asp Ala Cys Gly Lys Ser Phe
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Ser Arg Asn Ser His Leu Gln Ser His Gln Arg Val His Thr Gly Glu
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Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Gly Phe Ile Cys Ser Ser
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Cys Glu Glu Cys Gly Lys Gly Phe Ser Arg Pro Ser Ser Leu Gln Ala
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Arg Arg Asn Ser His Tyr Gln Val His Leu Val Val His Thr Gly Glu
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His Gln Leu Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys
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Gly Lys Gly Phe Ser Arg Arg Ala Asp Leu Lys Ile His Cys Arg Ile
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His Thr Gly Glu Lys Pro Tyr Asn Cys Glu Glu Cys Gly Lys Val Phe
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Arg Gln Ala Ser Asn Leu Leu Ala His Gln Arg Val His Ser Gly Glu
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Lys Pro Phe Lys Cys Glu Glu Cys Gly Lys Ser Phe Gly Arg Ser Ala
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His Leu Gln Ala His Gln Lys Val His Thr Gly Asp Lys Pro Tyr Lys
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Cys Asp Glu Cys Gly Lys Gly Phe Lys Trp Ser Leu Asn Leu Asp Met
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His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys Gly Glu Cys
690 695 700
Gly Lys Tyr Phe Ser Gln Ala Ser Ser Leu Gln Leu His Gln Ser Val
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His Thr Gly Glu Lys Pro Tyr Lys Cys Asp Val Cys Gly Lys Val Phe
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740 745 750
Lys Pro Tyr Lys Cys Glu Ile Cys Gly Lys Ser Phe Ser Trp Arg Ser
755 760 765
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<213> Homo sapiens

<220>
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<222> (474)..(2357)

<400> 17487

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Pro Leu Thr Thr Pro Asp Lys Glu Pro Asn Glu Asn Leu Ile Leu Arg
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His Gln Asp Ser Met Ser Lys Ser Glu Met Gln Val Lys Glu Gln Arg
65                  70                  75                  80
Thr Leu Lys Gly Gln Arg Ile Ile Thr His Asp Glu Glu Pro Gly Lys
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Asn Leu Val Pro Glu His Gln Asp Ser Val Ser Lys Leu Glu Met Gln
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Ile Glu Lys Thr Lys Lys Leu Pro Arg Glu Lys Arg His Ser Thr His
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Asp Glu Glu Ser Gly Glu Asn Pro Met Leu Lys His Gln Asp Ser Val
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Gly Arg Ser Ile Pro Asp Lys Asn Ser Met Phe Val His Gln Asp Ser
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Val Ser Lys Leu Gln Met Gln Glu Lys Lys Lys Ile Thr Pro Gly Arg
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Glu Arg Arg Asn Thr Arg Ile Val Val Pro Asn Glu Ser Val Ile Ser
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Val His Gln Asp Ser Lys Ser Lys Leu Gln Met Gln Glu Lys Lys Gln
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225                 230                 235                 240
Lys Lys Asp Ile Ser Leu Glu His Leu Leu Pro Glu Glu Lys Val Leu
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<212> DNA
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0050450-0750800

<213> Homo sapiens

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<222> (13)..(1800)

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<213> Homo sapiens

<400> 17491

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         35                  40                  45
Arg Thr Asp Lys Asp Leu Ile Ile Phe Asp Lys Gln Ser Ser Gln Arg
     50                  55                  60
Met Arg Gln Asn Leu Lys Leu Leu Val Glu Glu Thr Ser Cys Gln Gln
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Asn Met Ile Gln Glu Leu Ile Glu Thr Asn Gln Gln Leu Arg Asn Glu
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        115                 120                 125
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Asp Leu Gln Lys Glu Gln Lys Thr Leu Gln Val Lys Cys Gln His Tyr
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Glu Val Cys Arg Leu Lys Lys Glu Glu Glu Asp Arg Ile Val Thr Gln
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Asn Arg Val Phe Ala Tyr Leu Cys Lys Arg Val Pro His Thr Val Leu
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225                 230                 235                 240
Glu Glu Asn Asp Tyr Arg Asn Leu Asp Ala Ser Pro Thr Tyr Lys Gly
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Leu Leu Met Ser Leu Gln Asn Gln Leu Lys Glu Ser Lys Ser Lys Ile
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Asp Ala Leu Ser Ser Glu Lys Leu Asn Leu Gln Lys Asp Leu Glu Thr
        275                 280                 285
Arg Pro Thr Gln His Glu Leu Arg Leu Tyr Lys Gln Gln Val Lys Lys
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Leu Glu Lys Ala Leu Lys Lys Asn Val Lys Leu Gln Glu Leu Ile Asn
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Ser Ile Asn Ser Ile Ile His Asn Pro Arg Ala Pro Val Ile Ile Tyr
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Lys Arg Thr Lys Gly Gly Val Gln Asn Phe Asn Lys Asp Leu Val Gln
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Asp Cys Gly Phe Glu His Leu Val Pro Val Ile Glu Met Trp Ala Asp
385                 390                 395                 400
Gln Leu Thr Ser Leu Lys Asp Leu Tyr Lys Ser Leu Lys Thr Leu Ser
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Ala Glu Leu Val Pro Trp Leu Asn Leu Lys Lys Gln Asp Glu Asn Glu
            420                 425                 430
Gly Ile Lys Val Glu Asp Leu Leu Phe Ile Val Asp Thr Met Leu Glu
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Glu Val Glu Asn Lys Glu Lys Asp Ser Asn Met Pro His Phe Gln Thr
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Leu Gln Ala Ile Val Ser His Phe Gln Lys Leu Phe Asp Val Pro Ser
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Glu Met Asn Asn Ala Val Arg Asn Leu Gln Glu Leu Leu Glu Leu Asp
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        515                 520                 525
Arg Leu Ile Asn Glu Asp Val Asn Glu Gln Val Met Gln Val Leu Gly
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Pro Glu Asp Leu Gln Ser Ile Ile Tyr Lys Leu Glu Glu His Glu Glu
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<211> 2544
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (215)..(643)

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<212> PRT
<213> Homo sapiens

<400> 17493

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Asp Ile Thr Lys Gln Trp Thr Phe Asn Tyr Ile Leu Arg Glu Leu Pro
        35                  40                  45
Lys Val Pro Thr His Val Pro Val Cys Val Leu Gly Asn Tyr Arg Asp
    50                  55                  60
Met Gly Glu His Arg Val Ile Leu Pro Asp Asp Val Arg Asp Phe Ile
65                  70                  75                  80
Asp Asn Leu Asp Ser Arg Pro Pro Gly Ser Ser Tyr Phe Arg Tyr Ala
                85                  90                  95
Glu Ser Ser Met Lys Asn Ser Phe Gly Leu Lys Tyr Leu His Lys Phe
            100                 105                 110
Phe Asn Ile Pro Phe Leu Gln Leu Gln Val Ser Thr His His Val Gly
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<212> DNA
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<220>
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<400> 17494

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<211> 226
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<400> 17495
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Gln Gly Asp Ser Trp Gly Glu Gly Glu Val Asp Glu Glu Glu Gly Cys
35 40 45
Asp Gln Val Ala Arg Asp Leu Arg Ala Glu Phe Ser Ala Gly Ala Trp
50 55 60

0602450-030800

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Ser Glu Pro Arg Lys Arg Ser Val Leu Pro Pro Asp Gly Asn Gly Ser
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Pro Val Leu Pro Asp Lys Arg Asn Gly Ile Phe Pro Ala Ala Ala Gly
                 85                  90                  95
Ser Arg Ala Gln Pro Arg Arg Trp Pro Val Gln Val Leu Ser Ile Leu
            100                 105                 110
Cys Ser Leu Leu Phe Ala Ile Leu Leu Ala Phe Leu Leu Ala Ile Ala
        115                 120                 125
Tyr Leu Ile Val Lys Glu Leu His Ala Glu Asn Leu Lys Asn Glu Asp
    130                 135                 140
Asp Val Asp Thr Gly Leu Leu Gly Phe Trp Thr Leu Leu Ile Ile Ser
145                 150                 155                 160
Leu Thr Ala Gly Phe Ser Cys Cys Ser Phe Ser Trp Thr Val Thr Tyr
                165                 170                 175
Phe Asp Ser Phe Glu Pro Gly Met Phe Pro Pro Thr Pro Leu Ser Pro
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Ala Arg Phe Lys Lys Leu Thr Gly His Ser Phe His Met Gly Tyr Ser
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (28)..(486)

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<211> 153
<212> PRT
<213> Homo sapiens

<400> 17497
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20 25 30
Val Arg Ser Phe Gly Thr Gly Thr His Val Lys Leu Pro Gly Pro Ala
35 40 45
Pro Asp Lys Pro Asn Val Tyr Asp Phe Lys Thr Thr Tyr Asp Gln Met
50 55 60
Tyr Asn Asp Leu Leu Arg Lys Asp Lys Glu Leu Tyr Pro Ser Gly Leu

0962046-070800

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 65                  70                  75                  80
Pro Phe Lys Asn Pro Pro Cys Gly Pro Pro Trp Lys Val Leu Arg Val
                 85                  90                  95
Ala Arg Ala Gln Glu Ala Cys His Pro Val Gln Cys Thr His Trp Leu
            100                 105                 110
Leu Cys Leu Cys Glu Ser Leu Val Ser Ile Pro Gly Ala Arg Arg Ile
        115                 120                 125
Val His Gly Leu Val Pro Val Pro Pro Met Ala Val Gly Val Val Arg
    130                 135                 140
Arg Thr Asp Thr Val Trp Gly Ser Pro
145                 150
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0960204.0020800

<210> 17498
<211> 2454
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (356)..(2371)

<400> 17498
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<210> 17499
<211> 672
<212> PRT
<213> Homo sapiens

<400> 17499

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Pro Ala Gly Pro Gly Glu Lys Val Val Arg Val Leu Phe Pro Gly Cys
         35                  40                  45
Thr Pro Pro Ala Cys Leu Leu Asp Gly Leu Val Arg Leu Gln His Leu
     50                  55                  60
Arg Phe Leu Arg Glu Pro Val Val Thr Pro Gln Asp Leu Glu Gly Pro
 65                  70                  75                  80
Gly Arg Ala Glu Ser Lys Glu Ser Val Gly Ser Arg Asp Ser Ser Lys
                 85                  90                  95
Arg Glu Gly Leu Leu Ala Thr His Pro Arg Pro Gly Gln Glu Arg Pro
            100                 105                 110
Gly Val Ala Arg Lys Glu Pro Ala Arg Ala Glu Ala Pro Arg Lys Thr
        115                 120                 125
Glu Lys Glu Ala Lys Thr Pro Arg Glu Leu Lys Lys Asp Pro Lys Pro
    130                 135                 140
Ser Val Ser Arg Thr Gln Pro Arg Glu Val Arg Arg Ala Ala Ser Ser
145                 150                 155                 160
Val Pro Asn Leu Lys Lys Thr Asn Ala Gln Ala Ala Pro Lys Pro Arg
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Lys Ala Pro Ser Thr Ser His Ser Gly Phe Pro Pro Val Ala Asn Gly
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09529450.020800

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Pro Arg Ser Pro Pro Ser Leu Arg Cys Gly Glu Ala Ser Pro Pro Ser
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Ala Ala Cys Gly Ser Pro Ala Ser Gln Leu Val Ala Thr Pro Ser Leu
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Glu Leu Gly Pro Ile Pro Ala Gly Glu Glu Lys Ala Leu Glu Leu Pro
225                 230                 235                 240
Leu Ala Ala Ser Ser Ile Pro Arg Pro Arg Thr Pro Ser Pro Glu Ser
                245                 250                 255
His Arg Ser Pro Ala Glu Gly Ser Glu Arg Leu Ser Leu Ser Pro Leu
            260                 265                 270
Arg Gly Gly Glu Ala Gly Pro Asp Ala Ser Pro Thr Val Thr Thr Pro
        275                 280                 285
Thr Val Thr Thr Pro Ser Leu Pro Ala Glu Val Gly Ser Pro His Ser
    290                 295                 300
Thr Glu Val Asp Glu Ser Leu Ser Val Ser Phe Glu Gln Val Leu Pro
305                 310                 315                 320
Pro Ser Ala Pro Thr Ser Glu Ala Gly Leu Ser Leu Pro Leu Arg Gly
                325                 330                 335
Pro Arg Ala Arg Arg Ser Ala Ser Pro His Asp Val Asp Leu Cys Leu
            340                 345                 350
Val Ser Pro Cys Glu Phe Glu His Arg Lys Ala Val Pro Met Ala Pro
        355                 360                 365
Ala Pro Ala Ser Pro Gly Ser Ser Asn Asp Ser Ser Ala Arg Ser Gln
    370                 375                 380
Glu Arg Ala Gly Gly Leu Gly Ala Glu Glu Thr Pro Pro Thr Ser Val
385                 390                 395                 400
Ser Glu Ser Leu Pro Thr Leu Ser Asp Ser Asp Pro Val Pro Leu Ala
                405                 410                 415
Pro Gly Ala Ala Asp Ser Asp Glu Asp Thr Glu Gly Phe Gly Val Pro
            420                 425                 430
Arg His Asp Pro Leu Pro Asp Pro Leu Lys Val Pro Pro Pro Leu Pro
        435                 440                 445
Asp Pro Ser Ser Ile Cys Met Val Asp Pro Glu Met Leu Pro Pro Lys
    450                 455                 460
Thr Ala Arg Gln Thr Glu Asn Val Ser Arg Thr Arg Lys Pro Leu Ala
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Arg Pro Asn Ser Arg Ala Ala Ala Pro Lys Ala Thr Pro Val Ala Ala
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Ala Lys Thr Lys Gly Leu Ala Gly Gly Asp Arg Ala Ser Arg Pro Leu
            500                 505                 510
Ser Ala Arg Ser Glu Pro Ser Glu Lys Gly Gly Arg Ala Pro Leu Ser
        515                 520                 525
Arg Lys Ser Ser Thr Pro Lys Thr Ala Thr Arg Gly Pro Ser Gly Ser
    530                 535                 540
Ala Ser Ser Arg Pro Gly Val Ser Ala Thr Pro Pro Lys Ser Pro Val
545                 550                 555                 560
Tyr Leu Asp Leu Ala Tyr Leu Pro Ser Gly Ser Ser Ala His Leu Val
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0050450-0050800

Asp Glu Glu Leu Phe Gln Arg Val Arg Ala Leu Cys Tyr Val Ile Ser
580 585 590
Gly Gln Asp Gln Arg Lys Glu Glu Gly Met Arg Ala Val Leu Asp Ala
595 600 605
Leu Leu Ala Ser Lys Gln His Trp Asp Arg Asp Leu Gln Val Thr Leu
610 615 620
Ile Pro Thr Phe Asp Ser Val Ala Met His Thr Trp Tyr Ala Glu Thr
625 630 635 640
His Ala Arg His Gln Ala Leu Gly Ile Thr Val Leu Gly Ser Asn Ser
645 650 655
Met Val Ser Met Gln Asp Asp Ala Phe Pro Ala Cys Lys Val Glu Phe
660 665 670

0962946.0002800

<210> 17500
<211> 3913
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (141)..(1799)

<400> 17500
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<210> 17501
<211> 553
<212> PRT
<213> Homo sapiens

09529450.020800

<400> 17501

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            20                  25                  30
Lys Val Glu Asp Ser Thr Met Pro Ile Arg Arg Thr Val Asn Ser Thr
        35                  40                  45
Arg Glu Thr Pro Pro Lys Ser Lys Leu Ala Glu Gly Glu Glu Glu Lys
    50                  55                  60
Pro Glu Pro Asp Ile Ser Ser Glu Glu Ser Val Ser Thr Val Glu Glu
65                  70                  75                  80
Gln Glu Asn Glu Thr Pro Pro Ala Thr Ser Ser Glu Ala Glu Gln Pro
                85                  90                  95
Lys Gly Glu Pro Glu Asn Glu Glu Lys Glu Glu Asn Lys Ser Ser Glu
            100                 105                 110
Glu Thr Lys Lys Asp Glu Lys Asp Gln Ser Lys Glu Lys Glu Lys Lys
        115                 120                 125
Val Lys Lys Thr Ile Pro Ser Trp Ala Thr Leu Ser Ala Ser Gln Leu
    130                 135                 140
Ala Arg Ala Gln Lys Gln Thr Pro Met Ala Ser Ser Pro Arg Pro Lys
145                 150                 155                 160
Met Asp Ala Ile Leu Thr Glu Ala Ile Lys Ala Cys Phe Gln Lys Ser
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Gly Ala Ser Val Val Ala Ile Arg Lys Tyr Ile Ile His Lys Tyr Pro
            180                 185                 190
Ser Leu Glu Leu Glu Arg Arg Gly Tyr Leu Leu Lys Gln Ala Leu Lys
        195                 200                 205
Arg Glu Leu Asn Arg Gly Val Ile Lys Gln Val Lys Gly Lys Gly Ala
    210                 215                 220
Ser Gly Ser Phe Val Val Val Gln Lys Ser Arg Lys Thr Pro Gln Lys
225                 230                 235                 240
Ser Arg Asn Arg Lys Asn Arg Ser Ser Ala Val Asp Pro Glu Pro Gln
                245                 250                 255
Val Lys Leu Glu Asp Val Leu Pro Leu Ala Phe Thr Arg Leu Cys Glu
            260                 265                 270
Pro Lys Glu Ala Ser Tyr Ser Leu Ile Arg Lys Tyr Val Ser Gln Tyr
        275                 280                 285
Tyr Pro Lys Leu Arg Val Asp Ile Arg Pro Gln Leu Leu Lys Asn Ala
    290                 295                 300
Leu Gln Arg Ala Val Glu Arg Gly Gln Leu Glu Gln Ile Thr Gly Lys
305                 310                 315                 320
Gly Ala Ser Gly Thr Phe Gln Leu Lys Lys Ser Gly Glu Lys Pro Leu
                325                 330                 335
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            340                 345                 350
Met Asn Glu Pro Lys Thr Cys Ser Thr Thr Ala Leu Lys Lys Tyr Val
        355                 360                 365
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Leu Glu Asn His Pro Gly Thr Asn Ser Asn Tyr Gln Met His Leu Leu
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Lys Lys Thr Leu Gln Lys Cys Glu Lys Asn Gly Trp Met Glu Gln Ile
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Ser Gly Lys Gly Phe Ser Gly Thr Phe Gln Leu Cys Phe Pro Tyr Tyr
                405                 410                 415
Pro Ser Pro Gly Val Leu Phe Pro Lys Lys Glu Pro Asp Asp Ser Arg
            420                 425                 430
Asp Glu Asp Glu Asp Glu Asp Glu Ser Ser Glu Glu Asp Ser Glu Asp
        435                 440                 445
Glu Glu Pro Pro Pro Lys Arg Arg Leu Gln Lys Lys Thr Pro Ala Lys
    450                 455                 460
Ser Pro Gly Lys Ala Ala Ser Val Lys Gln Arg Gly Ser Lys Pro Ala
465                 470                 475                 480
Pro Lys Val Ser Ala Ala Gln Arg Gly Lys Ala Arg Pro Leu Pro Lys
                485                 490                 495
Lys Ala Pro Pro Lys Ala Lys Thr Pro Ala Lys Lys Thr Arg Pro Ser
            500                 505                 510
Ser Thr Val Ile Lys Lys Pro Ser Gly Gly Ser Ser Lys Lys Pro Ala
        515                 520                 525
Thr Ser Ala Arg Lys Glu Val Lys Leu Pro Gly Lys Gly Lys Ser Thr
    530                 535                 540
Met Lys Lys Ser Phe Arg Val Lys Lys
545                 550
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<210> 17502
<211> 2936
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (332)..(1894)

<400> 17502

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09259460.030800

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<212> PRT
<213> Homo sapiens

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65                  70                  75                  80
Ser Val Val Phe Ser Leu Leu Leu Thr Gly Thr Pro Ile Gln Asn Ser
                85                  90                  95
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            100                 105                 110
Ser Lys Glu Glu Val Gly Asp Phe Ile Gln Arg Tyr Gln Asp Ile Glu
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Thr Glu Val Val Ile Tyr His Gly Met Ser Ala Leu Gln Lys Lys Tyr
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Tyr Lys Ala Ile Leu Met Lys Asp Leu Asp Ala Phe Glu Asn Glu Thr
            180                 185                 190
Ala Lys Lys Val Lys Leu Gln Asn Ile Leu Ser Gln Leu Arg Lys Cys
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Val Gly Asp His Leu Thr Glu Ala Ser Gly Lys Leu His Leu Leu Asp
225                 230                 235                 240
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0950950 .0250800

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Ser Arg Asp Gln Glu Glu Gly Lys Asn His Met Tyr Leu Phe Glu Gly
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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

<400> 17505

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Arg	Gly	Asp	Thr	Tyr	Glu	Leu	Gln	Val	Arg	Gly	Phe	Ser	Ala	Glu	Gln
		35					40					45			
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         115                 120                 125
His Lys Asn Pro His Thr Gly His Val Asn Tyr Ile His Gly Ser Ser
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Gln Ala Gln Phe Val Ala Glu Thr His Ile Val Leu Leu Phe Asn Gly
145                 150                 155                 160
Gly Val Thr Leu Gly Met Val Leu Leu Cys Glu Ala Ala Thr Ser Asp
                 165                 170                 175
Met Asp Ile Gly Lys Arg Lys Ile Met Cys Val Ala Gly Ile Gly Leu
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<212> DNA
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<400> 17506

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0009/0000 • 0000/0000

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<212> PRT
<213> Homo sapiens

<400> 17507

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Met Ser Glu Leu Val Ser Asn Gly Val Gln Ile Tyr Gln Phe Pro Thr
         35                  40                  45
Asp Glu Glu Thr Val Ala Glu Ile Asn Ala Thr Met Ser Val His Leu
     50                  55                  60
Pro Phe Ala Val Val Gly Ser Thr Glu Glu Val Lys Ile Gly Asn Lys
 65                  70                  75                  80
Met Ala Lys Ala Arg Gln Tyr Pro Trp Gly Val Val Gln Val Glu Asn
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Glu Asn His Cys Asp Phe Val Lys Leu Arg Glu Met Leu Ile Arg Val
            100                 105                 110
Asn Met Glu Asp Leu Arg Glu Gln Thr His Thr Arg His Tyr Glu Leu
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Tyr Arg Arg Cys Lys Leu Glu Glu Met Gly Phe Lys Asp Thr Asp Pro
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Asp Ser Lys Pro Phe Ser Leu Gln Glu Thr Tyr Glu Ala Lys Arg Asn
145                 150                 155                 160
Glu Phe Leu Gly Glu Leu Gln Lys Lys Glu Glu Glu Met Arg Gln Met
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            180                 185                 190
Lys Glu Leu His Glu Lys Phe Asp Leu Leu Lys Arg Thr His Gln Glu
        195                 200                 205
Glu Lys Lys Lys Val Glu Asp Lys Lys Lys Glu Leu Glu Glu Glu Val
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Lys	Gly	Ile	Gln	Val	Arg	Met	Lys	Trp	Cys	Ala	Thr	Cys	Arg	Phe	Tyr
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Tyr Phe Gln Glu Lys Phe Phe Pro Gly His Glu Ser Arg Ala Thr Glu
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Lys Arg Lys Cys Ile Val Trp Gly Val Ala Phe Leu Ser Asp Gly Thr
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Leu Gln Arg Asp Thr Pro Ile Thr His Ile Ser Phe His Pro Lys Arg
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His Pro Glu Ile Gln Phe Ala Glu Ile Asn Lys Asp Gly Thr Ser Ile
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Asn Met Val Thr Leu Phe Gln Met Trp Val Val Pro Leu Tyr Phe Thr
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Val Lys Leu His Trp Trp Arg Phe Leu Val Ile Trp Ile Leu Phe Ser
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Gln Thr Thr Pro Arg Leu Val Tyr Lys Trp Phe Leu Leu Ile Tyr Lys
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Glu Arg Asp Phe Ala Glu Met Cys Ala Asp Tyr Met Ala Ser Thr Ile
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Gly Phe Tyr Ser Glu Ser Gly Met Pro Thr Lys His Leu Ser Asp Ser
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     50                  55                  60
Phe Val Lys Phe Arg Cys Met Ile Gln Asp Met Phe Asp Pro Glu Phe
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Tyr Met Gly Val Tyr Glu Thr Val Asn Gln Asn Thr Lys Ala His Val
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Ser Val Gly Gly Leu Gln Trp Cys Gly Glu Pro Lys Arg Leu Glu Thr
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Leu His Gln Leu Leu Val Val Ala Arg Cys Leu Ser Leu Ser Ala Gly
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Gln Thr Thr Leu Ser Arg Glu Arg Trp Leu Arg Ala Lys Gln Leu Glu
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<212> PRT
<213> Homo sapiens

<400> 17534

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Met Asp Gly Asn Arg Arg Tyr Ala Lys Lys Cys Gln Val Glu Arg Gln
         35                  40                  45
Glu Gly His Ser Gln Gly Phe Asn Lys Leu Ala Glu Thr Leu Arg Trp
     50                  55                  60
Cys Leu Asn Leu Gly Ile Leu Glu Val Thr Val Tyr Ala Phe Ser Ile
 65                  70                  75                  80
Glu Asn Phe Lys Arg Ser Lys Ser Glu Val Asp Gly Leu Met Asp Leu
                 85                  90                  95
Ala Arg Gln Lys Phe Ser Arg Leu Met Glu Glu Lys Glu Lys Leu Gln
            100                 105                 110
Lys His Gly Val Cys Ile Arg Val Leu Gly Asp Leu His Leu Leu Pro
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Leu Asp Leu Gln Glu Leu Ile Ala Gln Ala Val Gln Ala Thr Lys Asn
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Tyr Asn Lys Cys Phe Leu Tyr Val Cys Phe Ala Tyr Thr Ser Arg His
145                 150                 155                 160
Glu Ile Ser Asn Ala Val Arg Glu Met Ala Trp Gly Val Glu Gln Gly
                165                 170                 175
Leu Leu Asp Pro Ser Asp Ile Ser Glu Ser Leu Leu Asp Lys Cys Leu
            180                 185                 190
Tyr Thr Asn Arg Ser Pro His Pro Asp Ile Leu Ile Arg Thr Ser Gly
        195                 200                 205
Glu Val Arg Leu Ser Asp Phe Leu Leu Trp Gln Thr Ser His Ser Cys
    210                 215                 220
Leu Val Phe Gln Pro Val Leu Trp Pro Glu Tyr Thr Phe Trp Asn Leu
225                 230                 235                 240
Phe Glu Ala Ile Leu Gln Phe Gln Met Asn His Ser Met Leu Gln Gln
                245                 250                 255
Lys Ala Arg Asp Met Tyr Ala Glu Glu Arg Lys Arg Gln Gln Leu Glu
            260                 265                 270
Arg Asp Gln Ala Thr Val Thr Glu Gln Leu Leu Arg Glu Gly Leu Gln
        275                 280                 285
Ala Ser Gly Asp Ala Gln Leu Arg Arg Thr Arg Leu His Lys Leu Ser
    290                 295                 300
Ala Arg Arg Glu Glu Arg Val Gln Gly Phe Leu Gln Ala Leu Glu Leu
305                 310                 315                 320
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<213> Homo sapiens

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acgctgcgtg gaacattttc cgcgagtact ggagtttctg cgatctctgc gcgctattgc 420
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<211> 136
<212> PRT
<213> Homo sapiens

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20 25 30
Arg Val Leu Glu Phe Leu Arg Ser Leu Arg Ala Ile Ala Pro Gly Leu
35 40 45

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Val Arg Tyr Arg His His Glu Arg Leu Cys Met Gly Leu Lys Ala Lys
50 55 60
Val Val Glu Leu Ile Leu Gln Gly Arg Pro Trp Ala Gln Val Leu Lys
65 70 75 80
Ala Leu Asn His His Phe Pro Glu Ser Gly Pro Ile Val Arg Asp Pro
85 90 95
Lys Ala Thr Lys Gln Asp Leu Arg Lys Ile Leu Glu Ala Gln Glu Thr
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115 120 125
Ser Lys Leu Gln Val Arg Leu Val
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<211> 2138
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<220>
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<222> (143)..(850)

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<212> PRT
<213> Homo sapiens

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35 40 45
Asn Gly Ile Ala Pro Glu Lys Asp Val Asp Gly Phe His Ile Ile Asn
50 55 60
Ile Gly Arg Leu Cys Leu Asp Gln His Ser Leu Ile Pro Ala Thr Ala
65 70 75 80
Ser Ala Val Trp Glu Ile Ile Lys Arg Thr Gly Ile Gln Thr Phe Gly
85 90 95
Lys Asn Val Val Val Ala Gly Arg Ser Lys Asn Val Gly Met Pro Ile
100 105 110
Ala Met Leu Leu His Thr Asp Gly Glu His Glu Arg Pro Gly Gly Asp
115 120 125
Ala Thr Val Thr Ile Ala His Arg Tyr Thr Pro Lys Glu Gln Leu Lys
130 135 140
Ile His Thr Gln Leu Ala Asp Ile Ile Ile Val Ala Ala Gly Ile Pro
145 150 155 160
Lys Leu Ile Thr Ser Asp Met Val Lys Glu Gly Ala Ala Val Ile Asp
165 170 175
Val Gly Ile Asn Tyr Val His Asp Pro Val Thr Gly Lys Thr Lys Leu
180 185 190
Val Gly Asp Val Asp Phe Glu Ala Val Lys Lys Lys Ala Gly Phe Ile
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Thr Pro Val Pro Gly Gly Val Gly Pro Met Thr Val Ala Met Leu Leu
210 215 220

Lys Asn Thr Leu Leu Ala Ala Lys Lys Ile Ile Tyr
225 230 235

<210> 17539
<211> 2284
<212> DNA
<213> Homo sapiens

<220>
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<222> (128)..(1936)

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<212> PRT
<213> Homo sapiens

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         35                  40                  45
Met Asp Trp Gln Ser Ile Lys Ile Gln Glu Leu Met Ser Asp Asp Gln
     50                  55                  60
Arg Glu Ala Gly Arg Ile Pro Arg Thr Ile Glu Cys Glu Leu Val His
 65                  70                  75                  80
Asp Leu Val Asp Ser Cys Val Pro Gly Asp Thr Val Thr Ile Thr Gly
                 85                  90                  95
Ile Val Lys Val Ser Asn Ala Glu Glu Gly Ser Arg Asn Lys Asn Asp
            100                 105                 110
Lys Cys Met Phe Leu Leu Tyr Ile Glu Ala Asn Ser Ile Ser Asn Ser
        115                 120                 125
Lys Gly Gln Lys Thr Lys Ser Ser Glu Asp Gly Cys Lys His Gly Met
    130                 135                 140
Leu Met Glu Phe Ser Leu Lys Asp Leu Tyr Ala Ile Gln Glu Ile Gln
145                 150                 155                 160
Ala Glu Glu Asn Leu Phe Lys Leu Ile Val Asn Ser Leu Cys Pro Val
                165                 170                 175
Ile Phe Gly His Glu Leu Val Lys Ala Gly Leu Ala Leu Ala Leu Phe
            180                 185                 190
Gly Gly Ser Gln Lys Tyr Ala Asp Asp Lys Asn Arg Ile Pro Ile Arg
        195                 200                 205
Gly Asp Pro His Ile Leu Val Val Gly Asp Pro Gly Leu Gly Lys Ser
    210                 215                 220
Gln Met Leu Gln Ala Ala Cys Asn Val Ala Pro Arg Gly Val Tyr Val
225                 230                 235                 240
Cys Gly Asn Thr Thr Thr Thr Ser Gly Leu Thr Val Thr Leu Ser Lys
                245                 250                 255
Asp Ser Ser Ser Gly Asp Phe Ala Leu Glu Ala Gly Ala Leu Val Leu
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Gly Asp Gln Gly Ile Cys Gly Ile Asp Glu Phe Asp Lys Met Gly Asn
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Ala Lys Ala Gly Val Val Cys Ser Leu Pro Ala Arg Thr Ser Ile Ile
305                 310                 315                 320
Ala Ala Ala Asn Pro Val Gly Gly His Tyr Asn Lys Ala Lys Thr Val
                325                 330                 335
Ser Glu Asn Leu Lys Met Gly Ser Ala Leu Leu Ser Arg Phe Asp Leu
            340                 345                 350
Val Phe Ile Leu Leu Asp Thr Pro Asn Glu His His Asp His Leu Leu
        355                 360                 365
Ser Glu His Val Ile Ala Ile Arg Ala Gly Lys Gln Arg Thr Ile Ser
    370                 375                 380
Ser Ala Thr Val Ala Arg Met Asn Ser Gln Asp Ser Asn Thr Ser Val
385                 390                 395                 400
Leu Glu Val Val Ser Glu Lys Pro Leu Ser Glu Arg Leu Lys Val Val
                405                 410                 415
Pro Gly Glu Thr Ile Asp Pro Ile Pro His Gln Leu Leu Arg Lys Tyr
            420                 425                 430
Ile Gly Tyr Ala Arg Gln Tyr Val Tyr Pro Arg Leu Ser Thr Glu Ala
        435                 440                 445
Ala Arg Val Leu Gln Asp Phe Tyr Leu Glu Leu Arg Lys Gln Ser Gln
    450                 455                 460
Arg Leu Asn Ser Ser Pro Ile Thr Thr Arg Gln Leu Glu Ser Leu Ile
465                 470                 475                 480
Arg Leu Thr Glu Ala Arg Ala Arg Leu Glu Leu Arg Glu Glu Ala Thr
                485                 490                 495
Lys Glu Asp Ala Glu Asp Ile Val Glu Ile Met Lys Tyr Ser Met Leu
            500                 505                 510
Gly Thr Tyr Ser Asp Glu Phe Gly Asn Leu Asp Phe Glu Arg Ser Gln
        515                 520                 525
His Gly Ser Gly Met Ser Asn Arg Ser Thr Ala Lys Arg Phe Ile Ser
    530                 535                 540
Ala Leu Asn Asn Val Ala Glu Arg Thr Tyr Asn Asn Ile Phe Gln Phe
545                 550                 555                 560
His Gln Leu Arg Gln Ile Ala Lys Glu Leu Asn Ile Gln Val Ala Asp
                565                 570                 575
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Lys Gly Pro Lys Val Tyr Gln Leu Gln Thr Met
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<211> 3985
<212> DNA
<213> Homo sapiens

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<220>
<221> CDS
<222> (553)..(3222)

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cctgatgata gagaagattg ctgcccatct cgcggatttc acacctcgtc ttcagagtaa 180
cacaagagca ctttatcagt attgccccat tcctataatc aactatccac aactcgaaaa 240
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ttggccaatt aaagacccgg ttaagcttct aaaagatacc cttgatgcct ggaagaaaga 360
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<213> Homo sapiens

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Gln	Glu	Ala	Phe	Ser	Arg	Cys	Val	Ala	Val	Leu	Thr	Arg	Ser	Ser	Lys
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Trp Asn Asp Asn Ser Arg Asp Lys Val Ser Thr Thr Val Arg Glu Met
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Met Leu Glu His Phe Lys Asn Gln Gln Asp Asn Pro Glu Ala Asn Trp
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Thr Tyr His His Ser Asn Ile Pro Met Ser Leu Gly Pro Tyr Phe Pro
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195 200 205
Pro Arg Pro Glu Leu Asn Met Cys Leu Leu Pro Thr Met Val Glu Thr
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<212> PRT
<213> Homo sapiens

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35 40 45
Thr Thr Ala Glu Thr Phe Thr Asp Ile Phe Leu Cys Trp Phe Pro Phe
50 55 60
Tyr Tyr Glu Leu Lys Ile Ala Phe Val Ala Trp Leu Leu Ser Pro Tyr
65 70 75 80

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Thr Lys Gly Ser Ser Leu Leu Tyr Arg Lys Phe Val His Pro Thr Leu
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Ser Ser Lys Glu Lys Glu Ile Asp Asp Cys Leu Val Gln Ala Lys Asp
100 105 110
Arg Ser Tyr Asp Ala Leu Val His Phe Gly Lys Arg Gly Leu Asn Val
115 120 125
Ala Ala Thr Ala Ala Val Met Ala Ala Ser Lys Gly Gln Gly Ala Leu
130 135 140
Ser Glu Arg Leu Arg Ser Phe Ser Met Gln Asp Leu Thr Thr Ile Arg
145 150 155 160
Gly Asp Gly Ala Pro Ala Pro Ser Gly Pro Pro Pro Pro Gly Ser Gly
165 170 175
Arg Ala Ser Gly Lys His Gly Gln Pro Lys Met Ser Arg Ser Ala Ser
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Glu Ser Ala Ser Ser Ser Gly Thr Ala
195 200

<210> 17547
<211> 3047
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (63)..(2936)

<400> 17547
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<211> 958
<212> PRT
<213> Homo sapiens

<400> 17548
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35 40 45
Arg Arg Gly Leu Arg Gly Ala Phe Leu Met Ala Arg Gln Arg Pro Glu
50 55 60
Leu Leu Cys Gly Ala Val Ala Leu Gly Cys Ala Leu Leu Leu Ala Leu

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 65                  70                  75                  80
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                 85                  90                  95
Pro Val Ser Phe Phe Ser Leu Arg Ser Pro Val Leu Asp Leu Phe Gln
            100                 105                 110
Gly Gln Leu Asp Tyr Ala Glu Tyr Val Arg Arg Asp Ser Glu Val Val
        115                 120                 125
Leu Leu Phe Phe Tyr Ala Pro Trp Cys Gly Gln Ser Ile Ala Ala Arg
    130                 135                 140
Ala Glu Ile Glu Gln Ala Ala Ser Arg Leu Ser Asp Gln Val Leu Phe
145                 150                 155                 160
Val Ala Ile Asn Cys Trp Trp Asn Gln Gly Lys Cys Arg Lys Gln Lys
                165                 170                 175
His Phe Phe Tyr Phe Pro Val Ile Tyr Leu Tyr His Arg Ser Phe Gly
            180                 185                 190
Pro Ile Glu Tyr Lys Gly Pro Met Ser Ala Val Tyr Ile Glu Lys Phe
        195                 200                 205
Val Arg Arg Val Met Lys Pro Leu Leu Tyr Ile Pro Ser Gln Ser Glu
    210                 215                 220
Leu Leu Asp Phe Leu Ser Asn Tyr Glu Pro Gly Val Leu Gly Tyr Phe
225                 230                 235                 240
Glu Phe Ser Gly Ser Pro Gln Pro Pro Gly Tyr Leu Thr Phe Phe Thr
                245                 250                 255
Ser Ala Leu His Ser Leu Lys Lys Asp Tyr Leu Gly Thr Val Arg Phe
            260                 265                 270
Gly Val Ile Thr Asn Lys His Leu Ala Lys Leu Val Ser Leu Val His
        275                 280                 285
Ser Gly Ser Val Tyr Leu His Arg His Phe Asn Thr Ser Leu Val Phe
    290                 295                 300
Pro Arg Glu Val Leu Asn Tyr Thr Ala Glu Asn Ile Cys Lys Trp Ala
305                 310                 315                 320
Leu Glu Asn Gln Glu Thr Leu Phe Arg Trp Leu Arg Pro His Gly Gly
                325                 330                 335
Lys Ser Leu Leu Leu Asn Asn Glu Leu Lys Lys Gly Pro Ala Leu Phe
            340                 345                 350
Leu Phe Ile Pro Phe Asn Pro Leu Ala Glu Ser His Pro Leu Ile Asp
        355                 360                 365
Glu Ile Thr Glu Val Ala Leu Glu Tyr Asn Asn Cys His Gly Asp Gln
    370                 375                 380
Val Val Glu Arg Leu Leu Gln His Leu Arg Arg Val Asp Ala Pro Val
385                 390                 395                 400
Leu Glu Ser Leu Ala Leu Glu Val Pro Ala Gln Leu Pro Asp Pro Pro
                405                 410                 415
Thr Ile Thr Ala Ser Pro Cys Cys Asn Thr Val Val Leu Pro Gln Trp
            420                 425                 430
His Ser Phe Ser Arg Thr His Asn Val Cys Glu Leu Cys Val Asn Gln
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Thr Ser Gly Gly Met Lys Pro Ser Ser Val Ser Val Pro Gln Cys Ser
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                485                 490                 495
Thr Ser Tyr Ser Pro Phe Ser Tyr Tyr Thr Ala Cys Cys Arg Thr Ile
            500                 505                 510
Ser Arg Gly Val Ser Gly Phe Ile Asp Ser Glu Gln Gly Val Phe Glu
        515                 520                 525
Ala Pro Thr Val Ala Phe Ser Ser Leu Glu Lys Lys Cys Glu Val Asp
    530                 535                 540
Ala Pro Ser Ser Val Pro His Ile Glu Glu Asn Arg Tyr Leu Phe Pro
545                 550                 555                 560
Glu Val Asp Met Thr Ser Thr Asn Phe Thr Gly Leu Ser Cys Arg Thr
                565                 570                 575
Asn Lys Thr Leu Asn Ile Tyr Leu Leu Asp Ser Asn Leu Phe Trp Leu
            580                 585                 590
Tyr Ala Glu Arg Leu Gly Ala Pro Ser Ser Thr Gln Val Lys Glu Phe
        595                 600                 605
Ala Ala Ile Val Asp Val Lys Glu Glu Ser His Tyr Ile Leu Asp Pro
    610                 615                 620
Lys Gln Ala Leu Met Lys Leu Thr Leu Glu Ser Phe Ile Gln Asn Phe
625                 630                 635                 640
Ser Val Leu Tyr Ser Pro Leu Lys Arg His Leu Ile Gly Ser Gly Ser
                645                 650                 655
Ala Gln Phe Pro Ser Gln His Leu Ile Thr Glu Val Thr Thr Asp Thr
            660                 665                 670
Phe Trp Glu Val Val Leu Gln Lys Gln Asp Val Leu Leu Leu Tyr Tyr
        675                 680                 685
Ala Pro Trp Cys Gly Phe Cys Pro Ser Leu Asn His Ile Phe Ile Gln
    690                 695                 700
Leu Ala Arg Asn Leu Pro Met Asp Thr Phe Thr Val Ala Arg Ile Asp
705                 710                 715                 720
Val Ser Gln Asn Asp Leu Pro Trp Glu Phe Met Val Asp Arg Leu Pro
                725                 730                 735
Thr Val Leu Phe Phe Pro Cys Asn Arg Lys Asp Leu Ser Val Lys Tyr
            740                 745                 750
Pro Glu Asp Val Pro Ile Thr Leu Pro Asn Leu Leu Arg Phe Ile Leu
        755                 760                 765
His His Ser Asp Pro Ala Ser Ser Pro Gln Asn Val Ala Asn Ser Pro
    770                 775                 780
Thr Lys Glu Cys Leu Gln Ser Glu Ala Val Leu Gln Arg Gly His Ile
785                 790                 795                 800
Ser His Leu Glu Arg Glu Ile Gln Lys Leu Arg Ala Glu Ile Ser Ser
                805                 810                 815
Leu Gln Arg Ala Gln Val Gln Val Glu Ser Gln Leu Ser Ser Ala Arg
            820                 825                 830
Arg Asp Glu His Arg Leu Arg Gln Gln Gln Arg Ala Leu Glu Glu Gln
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        835                 840                 845
His Ser Leu Leu His Ala His Ser Glu Gln Leu Gln Ala Leu Tyr Glu
    850                 855                 860
Gln Lys Thr Arg Glu Leu Gln Glu Leu Ala Arg Lys Leu Gln Glu Leu
865                 870                 875                 880
Ala Asp Ala Ser Glu Asn Leu Leu Thr Glu Asn Thr Trp Leu Lys Ile
                885                 890                 895
Leu Val Ala Thr Met Glu Arg Lys Leu Glu Gly Arg Asp Gly Ala Glu
            900                 905                 910
Ser Leu Ala Ala Gln Arg Glu Val His Pro Lys Gln Pro Glu Pro Ser
        915                 920                 925
Ala Thr Pro Gln Leu Pro Gly Ser Ser Pro Pro Pro Ala Asn Val Ser
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<211> 2730
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (4)..(798)

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<210> 17550
<211> 265
<212> PRT
<213> Homo sapiens

<400> 17550
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20 25 30
Thr His Met Met Lys Glu Phe Pro Met Asp Leu Tyr Ile Arg Cys Ile
35 40 45
Gln Val Val His Lys Leu Leu Cys Tyr Gln Lys Lys Cys Arg Val Arg
50 55 60
Leu His Tyr Thr Trp Arg Glu Leu Trp Ser Ala Leu Ile Asn Leu Leu
65 70 75 80
Lys Phe Leu Met Ser Asn Glu Thr Val Leu Leu Ala Lys His Asn Ile
85 90 95
Phe Thr Leu Ala Leu Met Ile Val Asn Leu Phe Asn Met Phe Ile Thr
100 105 110
Tyr Gly Asp Thr Phe Leu Pro Thr Pro Ser Ser Tyr Asp Glu Leu Tyr

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        115                 120                 125
Tyr Glu Ile Ile Arg Met His Gln Ser Phe Asp Asn Leu Tyr Ser Met
    130                 135                 140
Val Leu Arg Leu Ser Thr Asn Ala Gly Gln Trp Lys Glu Ala Ala Ser
145                 150                 155                 160
Lys Val Thr His Ala Leu Val Asn Ile Arg Ala Ile Ile Asn His Phe
                165                 170                 175
Asn Pro Lys Ile Glu Ser Tyr Ala Ala Val Asn His Ile Ser Gln Leu
            180                 185                 190
Ser Glu Glu Gln Val Leu Glu Val Val Arg Ala Asn Tyr Asp Thr Leu
        195                 200                 205
Thr Leu Lys Leu Gln Asp Gly Leu Asp Gln Tyr Glu Arg Tyr Ser Glu
    210                 215                 220
Gln His Lys Glu Ala Ala Phe Phe Lys Glu Leu Val Arg Ser Ile Ser
225                 230                 235                 240
Thr Asn Val Arg Arg Asn Leu Val Phe His Thr Leu Ser Gln Glu Val
                245                 250                 255
Leu Leu Lys Glu Phe Ser Thr Ile Ser
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<211> 4193
<212> DNA
<213> Homo sapiens

<220>
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<222> (416)..(2794)

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35 40 45
Arg Glu Ile Arg Gln Ala Phe Lys Lys Leu Ala Leu Lys Leu His Pro
50 55 60
Asp Lys Asn Pro Asn Asn Pro Asn Ala His Gly Asp Phe Leu Lys Ile
65 70 75 80
Asn Arg Ala Tyr Glu Val Leu Lys Asp Glu Asp Leu Arg Lys Lys Tyr
85 90 95
Asp Lys Tyr Gly Glu Lys Gly Leu Glu Asp Asn Gln Gly Gly Gln Tyr
100 105 110
Glu Ser Trp Asn Tyr Tyr Arg Tyr Asp Phe Gly Ile Tyr Asp Asp Asp
115 120 125
Pro Glu Ile Ile Thr Leu Glu Arg Arg Glu Phe Asp Ala Ala Val Asn
130 135 140
Ser Gly Glu Leu Trp Phe Val Asn Phe Tyr Ser Pro Gly Cys Ser His
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165 170 175
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210 215 220
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Leu Phe Phe His Phe Gly Lys Asn Glu Asn Ser Asn Asp Pro Glu Leu
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Ile Asn Val Gly Ser Ile Asp Cys Gln Gln Tyr His Ser Phe Cys Ala
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Gln Glu Asn Val Gln Arg Tyr Pro Glu Ile Arg Phe Phe Pro Pro Lys
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<213> Homo sapiens

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<222> (651)..(956)

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<213> Homo sapiens

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Thr Leu Pro Thr Pro Ser Ser Val Pro Gly Arg Gly Leu Gly Gln Ser
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<213> Homo sapiens

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09602-0056 US2

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<213> Homo sapiens

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35 40 45
Glu Gln Ser Ala Pro Ser Ser Glu Lys Gly Gly Met Asn Gly Tyr His
50 55 60
Val Asn Gly Ala Ile Asn Asp Thr Glu Ser Val Asp Ser Leu Ser Glu
65 70 75 80
Gly Leu Glu Thr Leu Ser Ile Asp Ala Arg Glu Leu Glu Asp Pro Glu
85 90 95
Ser Ala Met Leu Asp Thr Leu Asp Arg Thr Gly Ser Met Leu Gln Asn
100 105 110
Gly Val Ser Asp Phe Glu Thr Lys Ser Leu Thr Met His Ser Ile His
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130 135 140
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180 185 190
Glu Met Asp Ala Ser Ile Lys Lys Met Lys Gln Ala Phe Ala Glu Leu
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Glu Ser Cys Leu Met Asp Arg Glu Val Ala Leu Leu Ala Glu Met Asp
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245 250 255

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Val Glu Thr Leu Lys Lys Ser Ile Asp Ser Phe Gly Gln Val Ser His
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Pro Lys Asn Ser Tyr Ser Thr Arg Ser Arg Cys Ser Ser Val Thr Ser
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Val Ser Leu Ser Ser Pro Ser Asp Ala Ser Ala Ala Ser Ser Ser Thr
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Gln Pro Leu Arg Glu Val Leu Pro Gly Asn Arg Arg Gly Gly Gln Gly
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Cys Lys Lys Thr Cys Ile Ala Ser Arg Asp Pro Tyr Cys Gly Trp Ile
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Lys Glu Gly Gly Ala Cys Ser His Leu Ser Pro Asn Ser Arg Leu Thr
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Gly Gly Met Leu Asp Trp Lys His Leu Leu Asp Ser Pro Asp Ser Thr
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Asp Pro Leu Gly Ala Val Ser Ser His Asn His Gln Asp Lys Lys Gly
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Val Ala Val Val Gln Arg Lys Glu Lys Glu Leu Thr His Ser Arg Arg
225                 230                 235                 240
Gly Ser Met Ser Ser Val Thr Lys Leu Ser Gly Leu Phe Gly Asp Thr
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Gln Ser Lys Asp Pro Lys Pro Glu Ala Ile Leu Thr Pro Leu Met His
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Asn Gly Lys Leu Ala Thr Pro Gly Asn Thr Ala Lys Met Leu Ile Lys
        275                 280                 285
Ala Asp Gln His His Leu Asp Leu Thr Ala Leu Pro Thr Pro Glu Ser
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Thr Pro Thr Leu Gln Gln Lys Arg Lys Pro Ser Arg Gly Ser Arg Glu
305                 310                 315                 320
Trp Glu Arg Asn Gln Asn Leu Ile Asn Ala Cys Thr Lys Asp Met Pro
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Pro Met Gly Ser Pro Val Ile Pro Thr Asp Leu Pro Leu Arg Ala Ser
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Pro Ser His Ile Pro Ser Val Val Val Leu Pro Ile Thr Gln Gln Gly
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Tyr Gln His Glu Tyr Val Asp Gln Pro Lys Met Ser Glu Val Ala Gln
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0505050-0505800

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Asn Leu Asp Ser Leu Pro Pro Lys Val Pro Gln Arg Glu Ala Ser Leu
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Gly Pro Pro Gly Ala Ser Leu Ser Gln Thr Gly Leu Ser Lys Arg Leu
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Glu Met His His Ser Ser Ser Tyr Gly Val Asp Tyr Lys Arg Ser Tyr
    450                 455                 460
Pro Thr Asn Ser Leu Thr Arg Ser His Gln Ala Thr Thr Leu Lys Arg
465                 470                 475                 480
Asn Asn Thr Asn Ser Ser Asn Ser Ser His Leu Ser Arg Asn Gln Ser
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Phe Gly Arg Gly Asp Asn Pro Pro Pro Ala Pro Gln Arg Val Asp Ser
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Ile Gln Val His Ser Ser Gln Pro Ser Gly Gln Ala Val Thr Val Ser
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Arg Gln Pro Ser Leu Asn Ala Tyr Asn Ser Leu Thr Arg Ser Gly Leu
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Lys Arg Thr Pro Ser Leu Lys Pro Asp Val Pro Pro Lys Pro Ser Phe
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Asn Leu Ser Gln Leu Pro Gly Leu Leu Glu Leu Leu Val Glu Tyr Phe

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 65                  70                  75                  80
Val Ser Ser Pro Ala Pro Met Glu Gly Gly Glu Glu Glu Glu Glu Leu
                 85                  90                  95
Leu Gly Pro Lys Leu Glu Glu Glu Glu Glu Glu Glu Val Val Glu Asn
            100                 105                 110
Asp Glu Glu Ile Ala Phe Ser Gly Lys Asp Lys Pro Ala Ser Glu Asn
        115                 120                 125
Ser Glu Glu Lys Leu Ile Ser Lys Phe Asp Lys Leu Pro Val Lys Ile
    130                 135                 140
Val Gln Lys Asn Asp Pro Phe Val Val Asp Cys Ser Asp Lys Leu Gly
145                 150                 155                 160
Arg Val Gln Glu Phe Asp Ser Gly Leu Leu His Trp Arg Ile Gly Gly
                165                 170                 175
Gly Asp Thr Thr Glu His Ile Gln Thr His Phe Glu Ser Lys Thr Glu
            180                 185                 190
Leu Leu Pro Ser Arg Pro His Ala Pro Cys Pro Pro Ala Pro Arg Lys
        195                 200                 205
His Val Thr Thr Ala Glu Gly Thr Pro Gly Thr Thr Asp Gln Glu Gly
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Pro Pro Pro Asp Gly Pro Pro Glu Lys Arg Ile Thr Ala Thr Met Asp
225                 230                 235                 240
Asp Met Leu Ser Thr Arg Ser Ser Thr Leu Thr Glu Asp Gly Ala Lys
                245                 250                 255
Ser Ser Glu Ala Ile Lys Glu Ser Ser Lys Phe Pro Phe Gly Ile Ser
            260                 265                 270
Pro Ala Gln Ser His Arg Asn Ile Lys Ile Leu Glu Asp Glu Pro His
        275                 280                 285
Ser Lys Asp Glu Thr Pro Leu Cys Thr Leu Leu Asp Trp Gln Asp Ser
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Leu Ala Lys Arg Cys Val Cys Val Ser Asn Thr Ile Arg Ser Leu Ser
305                 310                 315                 320
Phe Val Pro Gly Asn Asp Phe Glu Met Ser Lys His Pro Gly Leu Leu
                325                 330                 335
Leu Ile Leu Gly Lys Leu Ile Leu Leu His His Lys His Pro Glu Arg
            340                 345                 350
Lys Gln Ala Pro Leu Thr Tyr Glu Lys Glu Glu Glu Gln Asp Gln Gly
        355                 360                 365
Val Ser Cys Asn Lys Val Glu Trp Trp Trp Asp Cys Leu Glu Met Leu
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Arg Glu Asn Thr Leu Val Thr Leu Ala Asn Ile Ser Gly Gln Leu Asp
385                 390                 395                 400
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0050505-0050800

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    450                 455                 460
Ala Thr Pro Pro Phe Ser Arg Leu Glu Lys Leu Tyr Ser Thr Met Val
465                 470                 475                 480
Arg Phe Leu Ser Asp Arg Lys Asn Pro Val Cys Arg Glu Met Ala Val
                485                 490                 495
Val Leu Leu Ala Asn Leu Ala Gln Gly Asp Ser Leu Ala Ala Arg Ala
            500                 505                 510
Ile Ala Val Gln Lys Gly Ser Ile Gly Asn Leu Leu Gly Phe Leu Glu
        515                 520                 525
Asp Ser Leu Ala Ala Thr Gln Phe Gln Gln Ser Gln Ala Ser Leu Leu
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His Met Gln Asn Pro Pro Phe Glu Pro Thr Ser Val Asp Met Met Arg
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Arg Ala Ala Arg Ala Leu Leu Ala Leu Ala Lys Val Asp Glu Asn His
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Ser Glu Phe Thr Leu Tyr Glu Ser Arg Leu Leu Asp Ile Ser Val Ser
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0050250.0050800

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<213> Homo sapiens

<400> 17571

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<210> 17572
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (710)..(1903)

0050250-0050800

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35 40 45
Ser Leu Ser Thr Gly Thr Pro Gln Pro Gln Pro Pro Ser Glu Ser Thr
50 55 60
Glu Lys Glu Pro Glu Gln Asp Gly Pro Ala Ala Pro Ala Asp Gly Ser
65 70 75 80
Thr Val Glu Ser Leu Pro Arg Pro Leu Ser Pro Thr Lys Leu Thr Pro
85 90 95
Ile Val His Ser Pro Leu Arg Tyr Gln Ser Asp Ala Asp Leu Glu Ala
100 105 110
Leu Arg Arg Lys Leu Ala Asn Ala Pro Arg Pro Leu Lys Lys Arg Ser
115 120 125
Ser Ile Thr Glu Pro Glu Gly Pro Gly Gly Pro Asn Ile Gln Lys Leu
130 135 140
Leu Tyr Gln Arg Phe Asn Thr Leu Ala Gly Gly Met Glu Gly Thr Pro
145 150 155 160
Phe Tyr Gln Pro Ser Pro Ser Gln Asp Phe Met Gly Thr Leu Ala Asp
165 170 175
Val Asp Asn Gly Asn Thr Asn Ala Asn Gly Asn Leu Glu Glu Leu Pro
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Pro Ala Gln Pro Thr Ala Pro Leu Pro Ala Glu Pro Ala Pro Ser Ser
195 200 205
Asp Ala Asn Asp Asn Glu Leu Pro Ser Pro Glu Pro Glu Glu Leu Ile
210 215 220

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Ala Glu Ala Pro Ser Pro Gly Glu Glu Gln Val Pro Pro Ala Pro Leu
            260                 265                 270
Pro Pro Ala Ser His Pro Pro Ala Thr Ser Thr Asn Lys Arg Thr Asn
        275                 280                 285
Leu Lys Lys Pro Asn Ser Glu Arg Thr Gly His Gly Leu Arg Val Arg
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Phe Asn Pro Leu Ala Leu Leu Leu Asp Ala Ser Leu Glu Gly Glu Phe
305                 310                 315                 320
Asp Leu Val Gln Arg Ile Ile Tyr Glu Val Glu Asp Pro Ser Lys Pro
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Asn Asp Glu Gly Ile Thr Pro Leu His Asn Ala Val Cys Ala Gly His
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His His Ile Val Lys Phe Leu Leu Asp Phe Gly Val Asn Val Asn Ala
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<222> (30)..(2156)

<400> 17574

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0502050 - 0502805

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<212> PRT
<213> Homo sapiens

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Val Asn Ser Lys Pro Asp Ser Ala Tyr Arg Ser Val Asn Ser Leu Asp
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09629459.070800

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Phe Lys Lys Val Ile Leu Gly Gln Tyr Asn Trp Leu Ser Tyr Glu Asp
        115                 120                 125
Val Phe Val Arg Ala Phe Asn Phe Gly Asn Gly Leu Gln Met Leu Gly
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Gln Lys Pro Lys Thr Asn Ile Ala Ile Phe Cys Glu Thr Arg Ala Glu
145                 150                 155                 160
Trp Met Ile Ala Ala Gln Ala Cys Phe Met Tyr Asn Phe Gln Leu Val
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Thr Leu Tyr Ala Thr Leu Gly Gly Pro Ala Ile Val His Ala Leu Asn
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Glu Thr Glu Val Thr Asn Ile Ile Thr Ser Lys Glu Leu Leu Gln Thr
        195                 200                 205
Lys Leu Lys Asp Ile Val Ser Leu Val Pro Arg Leu Arg His Ile Ile
    210                 215                 220
Thr Val Asp Gly Lys Pro Pro Thr Trp Ser Glu Phe Pro Lys Gly Ile
225                 230                 235                 240
Ile Val His Thr Met Ala Ala Val Glu Ala Leu Gly Ala Lys Ala Ser
                245                 250                 255
Met Glu Asn Gln Pro His Ser Lys Pro Leu Pro Ser Asp Ile Ala Val
            260                 265                 270
Ile Met Tyr Thr Ser Gly Ser Thr Gly Leu Pro Lys Gly Val Met Ile
        275                 280                 285
Ser His Ser Asn Ile Ile Ala Gly Ile Thr Gly Met Ala Glu Arg Ile
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Pro Glu Leu Gly Glu Glu Asp Val Tyr Ile Gly Tyr Leu Pro Leu Ala
305                 310                 315                 320
His Val Leu Glu Leu Ser Ala Glu Leu Val Cys Leu Ser His Gly Cys
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Arg Ile Gly Tyr Ser Ser Pro Gln Thr Leu Ala Asp Gln Ser Ser Lys
            340                 345                 350
Ile Lys Lys Gly Ser Lys Gly Asp Thr Ser Met Leu Lys Pro Thr Leu
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Met Ala Ala Val Pro Glu Ile Met Asp Arg Ile Tyr Lys Asn Val Met
    370                 375                 380
Asn Lys Val Ser Glu Met Ser Ser Phe Gln Arg Asn Leu Phe Ile Leu
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Ala Tyr Asn Tyr Lys Met Glu Gln Ile Ser Lys Gly Arg Asn Thr Pro
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Leu Cys Asp Ser Phe Val Phe Arg Lys Val Arg Ser Leu Leu Gly Gly
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Leu Lys Asn Trp Glu Glu Gly Gly Tyr Phe Asn Thr Asp Lys Pro His
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Gly Gln Arg Trp Leu Cys Thr Gly Asp Ile Gly Glu Phe Glu Pro Asp
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Ala Arg Lys Lys Gly Leu Lys Gly Thr Trp Glu Glu Leu Cys Asn Ser
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Cys Glu Met Glu Asn Glu Val Leu Lys Val Leu Ser Glu Ala Ala Ile
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Pro Glu Pro Trp Thr Pro Glu Thr Gly Leu Val Thr Asp Ala Phe Lys
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<212> PRT

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<213> Homo sapiens

<400> 17577

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        35                  40                  45
Pro Val Asp Val Ala Arg Gln Arg Glu Leu Lys Trp Leu Asp Met Phe
    50                  55                  60
Ser Asn Trp Asp Lys Trp Leu Ser Arg Arg Phe Gln Lys Val Lys Leu
65                  70                  75                  80
Arg Cys Arg Lys Gly Ile Pro Ser Ser Leu Arg Ala Lys Ala Trp Gln
                85                  90                  95
Tyr Leu Ser Asn Ser Lys Glu Leu Leu Glu Gln Asn Pro Gly Lys Phe
            100                 105                 110
Glu Glu Leu Glu Arg Ala Pro Gly Asp Pro Lys Trp Leu Asp Val Ile
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Glu Lys Asp Leu His Arg Gln Phe Pro Phe His Glu Met Phe Ala Ala
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Leu Glu Ala Ile Gln Leu Asp Gly Glu Ile Phe Phe Ala Leu Leu Arg
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Arg Ala Ser Pro Leu Ala His Arg His Leu Arg Arg Gln Arg Ile Asp
225                 230                 235                 240
Pro Val Leu Tyr Met Thr Glu Trp Phe Met Cys Ile Phe Ala Arg Thr
                245                 250                 255
Leu Pro Trp Ala Ser Val Leu Arg Val Trp Asp Met Phe Phe Cys Glu
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Pro Gly Pro Val Val Thr Ala Glu Gly Leu His Pro Ser Leu Pro Ser
            420                 425                 430
Pro Thr Gly Asn Ser Thr Pro Leu Gly Ser Ser Lys Glu Thr Arg Lys
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Gln Glu Lys Glu Arg Gln Lys Gln Glu Lys Glu Arg Gln Lys Gln Glu
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<212> DNA
<213> Homo sapiens

<400> 17578

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<212> DNA
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Thr Val Asp Ser Ile Thr Pro Leu His Ala Ala Ser Leu Gln Gly Gln
    50                  55                  60
Ala Arg Cys Val Gln Leu Leu Leu Ala Ala Gly Ala Gln Val Asp Ala
65                  70                  75                  80
Arg Asn Ile Asp Gly Ser Thr Pro Leu Cys Asp Ala Cys Ala Ser Gly
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Ser Ile Glu Cys Val Lys Leu Ser Leu Ser Tyr Gly Ala Lys Val Asn
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Pro Pro Leu Tyr Thr Ala Ser Pro Leu His Glu Ala Cys Met Ser Gly
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Ser Ser Glu Cys Val Arg Leu Leu Ile Asp Val Gly Ala Asn Leu Glu
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Ala His Asp Cys His Phe Gly Thr Pro Leu His Val Ala Cys Ala Arg
145                 150                 155                 160
Glu His Leu Asp Cys Val Lys Val Leu Leu Asn Ala Gly Ala Asn Val
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Asn Ala Ala Lys Leu His Glu Thr Ala Leu His His Ala Ala Lys Val
            180                 185                 190
Lys Asn Val Asp Leu Ile Glu Met Leu Ile Glu Phe Gly Gly Asn Ile
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Tyr Ala Arg Asp Asn Arg Gly Lys Lys Pro Ser Asp Tyr Thr Trp Ser
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Ser Ser Ala Pro Ala Lys Cys Phe Glu Tyr Tyr Glu Lys Thr Pro Leu
225                 230                 235                 240
Thr Leu Ser Gln Leu Cys Arg Val Asn Leu Arg Lys Ala Thr Gly Val
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<212> PRT
<213> Homo sapiens

<400> 17582

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        35                  40                  45
Gly Gln Gln Ser Met Val Glu Gln Pro Pro Gly Met Met Pro Asn Gly
    50                  55                  60
Gln Asp Met Ser Thr Met Glu Ser Gly Pro Asn Asn His Gly Asn Phe
65                  70                  75                  80
Gln Gly Asp Ser Asn Phe Asn Arg Met Trp Gln Pro Glu Trp Gly Met
                85                  90                  95
His Gln Gln Pro Pro His Pro Pro Pro Asp Gln Pro Trp Met Pro Pro
            100                 105                 110
Thr Pro Gly Pro Met Asp Ile Val Pro Pro Ser Glu Asp Ser Asn Ser
        115                 120                 125
Gln Asp Ser Gly Glu Phe Ala Pro Asp Asn Arg His Ile Phe Asn Gln
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145                 150                 155                 160
Val Asn Gln Phe Asp Tyr Gln His Gly Ala Ala Phe Gly Pro Pro Gln
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Gly Gly Phe His Pro Pro Tyr Trp Gln Pro Gly Pro Pro Gly Pro Pro
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Ala Pro Pro Gln Asn Arg Arg Glu Arg Pro Ser Ser Phe Arg Asp Arg
        195                 200                 205
Gln Arg Ser Pro Ile Ala Leu Pro Val Lys Gln Glu Pro Pro Gln Ile
    210                 215                 220
Asp Ala Val Lys Arg Arg Thr Leu Pro Ala Trp Ile Arg Glu Gly Leu
225                 230                 235                 240
Glu Lys Met Glu Arg Glu Lys Gln Lys Lys Leu Glu Lys Glu Arg Met
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Glu Gln Gln Arg Ser Gln Leu Ser Lys Lys Glu Lys Lys Ala Thr Glu
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Asp Ala Glu Gly Gly Asp Gly Pro Arg Leu Pro Gln Arg Ser Lys Phe
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Asp Ser Asp Glu Glu Glu Glu Asp Thr Glu Asn Val Glu Ala Ala Ser
    290                 295                 300
Ser Gly Lys Val Thr Arg Ser Pro Ser Pro Val Pro Gln Glu Glu His
305                 310                 315                 320
Ser Asp Pro Glu Met Thr Gly Glu Glu Lys Glu Tyr Gln Met Met Leu
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Leu Thr Lys Met Leu Leu Thr Glu Ile Leu Leu Asp Val Thr Asp Glu
            340                 345                 350
Glu Ile Tyr Tyr Val Ala Lys Asp Ala His Arg Lys Ala Thr Lys Gly
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Ile Phe Trp Cys Phe Trp Phe Cys Phe Ser Trp Gly Ile Leu Val Leu
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<213> Homo sapiens

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<212> PRT
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35 40 45
Thr Leu Arg Trp Glu Arg Thr Thr Pro Asn Tyr Ser Ser Gly Glu Ala
50 55 60
Ser Ser Ser Trp Gln Val Pro Ser Ser Phe Glu Ser Val Pro Ser Ser
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Gly Ser Gln Leu Pro Pro Leu Glu Arg Thr Glu Gly Gln Thr Pro Ser
85 90 95

Ser Ser Arg Leu Glu Leu Ser Ser Ser Ala Ser Pro Gln Glu Glu Arg
100 105 110
Thr Val Gly Val Ala Phe Asn Gln Glu Thr Gly His Trp Glu Arg Ile
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Tyr Thr Gln Ser Ser Arg Ser Gly Thr Val Ser Gln Glu Ala Leu His
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Gln Asp Met Pro Glu Glu Ser Ser Glu Glu Asp Ser Leu Arg Arg Arg
145 150 155 160
Leu Leu Glu Ser Ser Leu Ile Ser Leu Ser Arg Tyr Asp Gly Ala Gly
165 170 175
Ser Arg Glu His Pro Ile Tyr Pro Asp Pro Ala Arg Leu Ser Pro Ala
180 185 190
Ala Tyr Tyr Ala Gln Arg Met Ile Gln Tyr Leu Ser Arg Arg Asp Ser
195 200 205
Ile Arg Gln Arg Ser Met Arg Tyr Gln Gln Asn Arg Leu Arg Ser Ser
210 215 220
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225 230 235 240
Asp Leu Glu Phe Glu Asp Phe Glu Asp Asn Gly Asp Arg Ser Arg His
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275 280 285
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305 310 315 320
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355 360 365
Gly Gln Leu Leu Ala Ala Phe Ile Pro Ser Ser Gln Arg Gly Phe Pro
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Asp Glu Gly Ile Leu Ala Val Tyr Ser Leu Ala Pro His Asn Leu Gly
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515 520 525
Ser Asn Ser Arg Ser Ser Glu Arg Pro Gly Thr Ser Arg Ala Thr Trp
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Arg Thr Asp Arg Asp Met Gly Leu Met Asn Ala Ile Gly Leu Gln Pro
545 550 555 560
Arg Asn Pro Ala Thr Ser Val Thr Ser Gln Gly Thr Gln Thr Leu Ala
565 570 575
Leu Gln Leu Gln Asn Ala Glu Thr Gln Thr Glu Arg Glu Val Pro Glu
580 585 590
Pro Gly Thr Ala Ala Ser Gly Pro Gly Glu Gly Glu Gly Ser Glu Tyr
595 600 605
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610 615 620
Glu Gly Gly Met Thr Ala Val Val Gln Arg Glu Gln Ser Thr Thr Met
625 630 635 640
Ala Ser Met Gly Gly Phe Gly Asn Asn Ile Ile Val Ser His Arg Ile
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His Arg Ser Ser Gln Thr Gly Thr Glu Pro Gly Ala Ala His Thr Ser
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675 680 685
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690 695 700
Gly Thr Pro Gly Arg Glu Pro Thr Gln Pro Thr Leu Pro Ser Ser Ser
705 710 715 720
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Ser Ile Ala Ser Val Ser Ala Ser Gln Lys Ile Arg Glu Leu Glu Ser
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Met Ile Gly Ile Asp Pro Gly Asn Arg Gly Ile Gly His Leu Leu Cys
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Lys Asp Glu Leu Leu Lys Ala Ser Leu Ser Leu Ser His Ala Arg Ser
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Glu Glu Thr Asp Gly Pro Pro Gly Ala Val Ala Leu Val Ala Phe Leu
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Asp His Leu Val Ala Ile Glu Arg Ala Gly Arg Ala Ala Asp Gly Asn
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Tyr Tyr Asn Ala Arg Lys Met Asn Ile Lys His Leu Val Asp Pro Ile
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Asp Asp Leu Phe Leu Ala Ala Lys Lys Ile Pro Gly Ile Ser Ser Thr
    450                 455                 460
Gly Val Ser Asn Trp Gly Gly Tyr Ala Leu Ala Cys Ala Leu Tyr Ile
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Val Ile Lys Glu Glu Lys Met Leu Gly Ile Leu Val Gln His Lys Val
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Arg Ser Gly Val Ser Gly Ile Val Gly Met Glu Val Asp Gly Leu Pro
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0050350 - 05-12-2000

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<212> DNA
<213> Homo sapiens

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<222> (101)..(1456)

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<212> PRT
<213> Homo sapiens

<400> 17592

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225					230					235					240
Pro	Pro	Ser	Leu	Ser	Pro	Pro	Gly	Thr	Thr	Gly	Ile	Glu	Gln	Ser	Leu
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0050450 - 0050450

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Val Asn Pro Gly Leu Pro Pro Leu Pro Ser Met Pro Pro Arg Asn Leu
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Pro Gly Ile Ala Pro Leu Pro Leu Pro Ser Glu Phe Leu Pro Ser Phe
        355                 360                 365
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385                 390                 395                 400
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<212> DNA
<213> Homo sapiens

<400> 17593

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<212> DNA
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<220>
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<212> PRT
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50 55 60
Ser Glu Asp Leu Val Ile Arg Leu Arg Arg Pro Pro Leu Arg Cys Pro
65 70 75 80
Arg Tyr Glu Ala Thr Ser Val Gln Gln Lys Val Asn Phe Ser Glu Glu
85 90 95
Gly Glu Thr Glu Glu Asp Asp Gln Asp Ser Ser His Ser Ser Val Thr
100 105 110
Thr Val Lys Ala Arg Ser Arg Asp Ser Asp Glu Ser Gly Asp Lys Thr
115 120 125
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Ser Gln Asn Phe Thr Ala His Asp Lys Gln Arg Ser Val Leu Ser Ser
145 150 155 160
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Arg Thr Arg Met Gln Asn Asp Ser Ile Leu Lys Ser Glu Leu Gly Asn
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Val Ala Leu Val Leu Thr Val Leu Leu Glu Glu Glu Thr Leu Gly Thr
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<213> Homo sapiens

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Pro Lys Arg Gly Leu Asp Val Asn Lys Cys Glu Ile Ala Arg Phe Phe
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Lys Leu His Glu Arg Lys Cys Glu Pro Ile Ile Met Thr Val Pro Arg
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Ala Leu Arg His Arg Phe Gly Cys Ile Ser Arg Lys Cys Pro Ala Ile
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Arg Glu Met Val Ser Gln Leu Gln Arg Glu Cys Tyr Leu Lys His Asp
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Ser Phe Cys Thr Ser Ala Ile Gln Lys Pro Pro Thr Ala Pro Pro Glu
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225                 230                 235                 240
Glu Ala Gly His His Leu Pro Glu Pro Ser Ser Arg Glu Thr Gly Arg
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Gly Ala Lys Gly Glu Arg Gly Ser Lys Ser His Pro Asn Ala His Ala
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Arg Ile Leu Leu Asp Asn Asp His Tyr Ala Met Glu Lys Leu Lys Lys
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Val Gly Arg Ser Val Ala Lys Thr Leu Gly Arg Glu Phe His Arg Ile
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Gly Tyr Thr Gln Glu Glu Lys Ile Glu Ile Ala His Arg His Leu Ile
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Glu Met Pro Ile Leu Ile Asp Phe His Ala Leu Lys Asp Ile Leu Gly
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Pro Pro Met Tyr Glu Met Glu Val Ser Gln Arg Leu Ser Gln Pro Gly
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405 410 415
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Lys	Pro	Gly	Lys	Phe	Gln	Arg	Thr	Arg	Val	Pro	Arg	Ala	Glu	Ser	Gly
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Asp	Ser	Leu	Gly	Ser	Glu	Asp	Arg	Asp	Leu	Leu	Tyr	Ser	Ile	Asp	Ala
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Tyr	Arg	Ser	Gln	Arg	Phe	Lys	Glu	Thr	Glu	Arg	Pro	Ser	Ile	Lys	Gln
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Glu	Ala	Glu	Ala	Glu	Arg	Leu	Leu	Leu	Ile	Ala	Thr	Gly	Lys	Arg	Thr
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<212> PRT
<213> Homo sapiens

<400> 17607

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Phe	Asp	Arg	Ser	Lys	His	Ala	His	Val	Ile	Gln	Asn	Gln	Phe	Cys	His
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Glu	Asp	Val	Lys	Asn	Met	Asn	Thr	Trp	Leu	Leu	Phe	Leu	Pro	Leu	Phe
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Pro	Val	Gln	Val	Gln	Thr	Leu	Ile	Val	Val	Ile	Ile	Gly	Met	Leu	Val
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Leu	Leu	Leu	Asp	Phe	Leu	Gly	Leu	Val	His	Leu	Gly	Gln	Leu	Leu	Ile
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Phe	His	Ile	Tyr	Leu	Lys	Ala	Lys	Lys	Met	Thr	Thr	Phe	Glu	Tyr	Leu
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Ile	Asn	Asn	Arg	Lys	Glu	Glu	Ser	Ser	Lys	His	Gln	Ala	Val	Arg	Lys
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Asp Ser Thr Ala Arg Glu Gly Asp Glu Asp Pro Cys Pro Ser Ala Leu
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        355                 360                 365
Phe Ser Thr Arg Val His Pro Asp Gly Gly Ser Met Ala Gln Glu Ala
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<400> 17609

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			20					25				30			
Arg	Gly	Gln	Ser	Pro	Leu	Pro	Arg	Gln	Arg	Phe	Pro	Val	Pro	Asp	Ser
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Val	Leu	Asn	Met	Phe	Pro	Gly	Thr	Glu	Glu	Gly	Pro	Glu	Asp	Asp	Ser
	50					55					60				
Thr	Lys	His	Gly	Gly	Arg	Val	Arg	Thr	Phe	Pro	His	Glu	Arg	Gly	Asn
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Trp	Ala	Thr	His	Val	Tyr	Val	Pro	Tyr	Glu	Ala	Lys	Glu	Glu	Phe	Leu
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Asp	Leu	Leu	Asp	Val	Leu	Leu	Pro	His	Ala	Gln	Thr	Tyr	Val	Pro	Arg
			100					105					110		
Leu	Val	Arg	Met	Lys	Val	Phe	His	Leu	Ser	Leu	Ser	Gln	Ser	Val	Val
		115					120					125			
Leu	Arg	His	His	Trp	Ile	Leu	Pro	Phe	Val	Gln	Ala	Leu	Lys	Ala	Arg
	130					135					140				
Met	Thr	Ser	Phe	His	Arg	Phe	Phe	Phe	Thr	Ala	Asn	Gln	Val	Lys	Ile
145					150					155					160
Tyr	Thr	Asn	Gln	Glu	Lys	Thr	Arg	Thr	Phe	Ile	Gly	Leu	Glu	Val	Thr
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Ser Gly His Ala Gln Phe Leu Asp Leu Val Ser Glu Val Asp Arg Val
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210 215 220
Gln Cys Leu Gln Glu Leu Gln Ala Ile Val Asp Gly Phe Glu Asp Ala
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<400> 17611

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			20					25					30		
Glu	Ser	Glu	Arg	Ala	Leu	Gln	Ala	Pro	His	Ser	Pro	Ser	Lys	Thr	Asp
		35					40					45			
Gly	Lys	Glu	Leu	Ala	Gly	Thr	Met	Asp	Gly	Glu	Gly	Thr	Leu	Phe	Gln
	50					55					60				
Thr	Glu	Ser	Pro	Gln	Ser	Gly	Ser	Ile	Leu	Thr	Glu	Glu	Thr	Glu	Val
65					70					75					80
Lys	Gly	Thr	Leu	Glu	Gly	Asp	Val	Cys	Gly	Val	Glu	Pro	Pro	Gly	Pro
				85					90					95	
Gly	Asp	Thr	Val	Val	Gln	Gly	Asp	Leu	Gln	Glu	Thr	Thr	Val	Val	Thr
			100					105					110		
Gly	Leu	Gly	Pro	Asp	Thr	Gln	Asp	Leu	Glu	Gly	Gln	Ser	Pro	Pro	Gln
		115					120					125			
Ser	Leu	Pro	Ser	Thr	Pro	Lys	Ala	Ala	Trp	Ile	Arg	Glu	Glu	Gly	Arg
	130					135					140				
Cys	Ser	Ser	Ser	Asp	Asp	Asp	Thr	Asp	Val	Asp	Met	Glu	Gly	Leu	Arg

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Ile Ser Leu Asn Met Cys Leu Leu Gly Ala Leu Val Leu Leu Gly Leu
        195                 200                 205
Gly Val Leu Leu Phe Ser Gly Gly Leu Ser Glu Ser Glu Thr Gly Pro
    210                 215                 220
Met Glu Glu Val Glu Arg Gln Val Leu Pro Asp Pro Glu Val Leu Glu
225                 230                 235                 240
Ala Val Gly Asp Arg Gln Asp Gly Leu Arg Glu Gln Leu Gln Ala Pro
                245                 250                 255
Val Pro Pro Asp Ser Val Pro Ser Leu Gln Asn Ile Gly Leu Leu Leu
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Asp Lys Leu Ala Lys Glu Asn Gln Asp Ile Arg Leu Leu Gln Ala Gln
        275                 280                 285
Leu Gln Ala Gln Lys Glu Glu Leu Gln Ser Leu Met His Gln Pro Lys
    290                 295                 300
Gly Leu Glu Glu Glu Asn Ala Gln Leu Arg Gly Ala Leu Gln Gln Gly
305                 310                 315                 320
Glu Ala Phe Gln Arg Ala Leu Glu Ser Glu Leu Gln Gln Leu Arg Ala
                325                 330                 335
Arg Leu Gln Gly Leu Glu Ala Asp Cys Val Arg Gly Pro Asp Gly Val
            340                 345                 350
Cys Leu Ser Gly Asp Arg Gly Pro Gln Gly Asp Lys Ala Ile Arg Glu
        355                 360                 365
Gln Gly Pro Arg Glu Gln Glu Pro Glu Leu Ser Phe Leu Lys Gln Lys
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Glu Gln Leu Glu Ala Glu Ala Gln Ala Leu Arg Gln Glu Leu Glu Arg
385                 390                 395                 400
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                405                 410                 415
Gln Asp Ala Ser Arg Gly Asp Pro Ala His Ala Gly Leu Ala Glu Leu
            420                 425                 430
Gly His Arg Leu Ala Gln Lys Leu Gln Gly Leu Glu Asn Trp Gly Gln
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Asp Pro Gly Val Ser Ala Asn Ala Ser Lys Ala Trp His Gln Lys Ser
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His Phe Gln Asn Ser Arg Glu Trp Ser Gly Lys Glu Lys Trp Trp Asp
465                 470                 475                 480
Gly Gln Arg Asp Arg Lys Ala Glu His Trp Lys His Lys Lys Glu Glu
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Ser Gly Arg Glu Arg Lys Lys Asn Trp Gly Gly Gln Glu Asp Arg Glu
            500                 505                 510
Pro Ala Gly Arg Trp Lys Glu Gly Arg Pro Arg Val Glu Glu Ser Gly
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Ser Lys Lys Glu Gly Lys Arg Gln Gly Pro Lys Glu Pro Pro Arg Lys
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Asp Gly Ile Phe Arg His Asp Arg Leu Arg Phe Arg Asp Phe Val Asp
            580                 585                 590
Ala Leu Glu Asp Ser Leu Glu Glu Val Ala Val Gln Gln Thr Gly Asp
        595                 600                 605
Asp Asp Glu Val Asp Asp Phe Glu Asp Phe Ile Phe Ser His Phe Phe
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<211> 323
<212> PRT
<213> Homo sapiens

<400> 17613

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         35                  40                  45
Glu Leu Gly Lys Ala Ser Ala Lys Ala Gln Asn Leu Ser Ala Pro Ile
     50                  55                  60
Thr Ser Ala Ser Arg Met Gln Ser Asn Arg His Val Val Tyr Ile Leu
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Lys Asp Ser Ser Ala Arg Pro Ala Gly Lys Gly Ala Ile Ile Gly Phe
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Ile Lys Val Gly Tyr Lys Lys Leu Phe Val Leu Asp Asp Arg Glu Ala
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His Asn Glu Val Glu Pro Leu Cys Ile Leu Asp Phe Tyr Ile His Glu
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Val Pro Gln Val Asn Asn Phe Val Ile Phe Glu Gly Phe Phe Ala His
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Gln His Arg Pro Pro Ala Pro Ser Leu Arg Ala Thr Arg His Ser Arg
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Ala Ala Ala Val Asp Pro Thr Pro Ala Ala Pro Ala Arg Lys Leu Pro
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Glu Phe Leu Lys Val Ala Val Glu Pro Pro Trp Pro Leu Asn Arg Ala
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Pro Arg Arg Ala Thr Pro Pro Ala His Pro Pro Pro Arg Ser Ser Ser
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<400> 17614

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Val His Ile Ser Arg Val Lys Ser Val Asn Leu Asp Gln Trp Thr Ala
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245 250 255
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260 265 270
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Pro Ser Met Met Val Gly Met Pro Met Pro Asn Gly Phe Met Gly Asn
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50 55 60
Thr Ser Leu Asn Ser Phe Arg Ile Ser Asp His His His Val Gln Val
65 70 75 80
Ser Glu Cys Arg Pro Thr Thr Arg Asp Gly Phe His Pro Pro Ala Leu
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<400> 17619
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35 40 45
Lys Thr Val Glu Leu Gln Gly Lys Lys Ile Lys Leu Gln Ile Trp Asp
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Thr Ala Gly Gln Glu Arg Phe His Thr Ile Thr Thr Ser Tyr Tyr Arg
65 70 75 80
Gly Ala Met Gly Ile Met Leu Val Tyr Asp Ile Thr Asn Gly Lys Ser
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Phe Glu Asn Ile Ser Lys Trp Leu Arg Asn Ile Asp Glu His Ala Asn
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Glu Asp Val Glu Arg Met Leu Leu Gly Asn Lys Cys Asp Met Asp Asp
115 120 125
Lys Arg Val Val Pro Lys Gly Lys Gly Glu Gln Ile Ala Arg Glu His
130 135 140
Gly Ile Arg Phe Phe Glu Thr Ser Ala Lys Ala Asn Ile Asn Ile Glu
145 150 155 160
Lys Ala Phe Leu Thr Leu Ala Glu Asp Ile Leu Arg Lys Thr Pro Val
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Thr Gly Trp Lys Ser Lys Cys Cys
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Leu Leu Gln Pro Arg Gly Ala Ser Ala Gly Ser Leu His Ser Pro Gly
20 25 30
Leu Ser Glu Cys Phe Gln Val Asn Gly Ala Asp Tyr Arg Gly His Gln
35 40 45

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Gln Thr Gln Gln His Ser Tyr Ser Ser Ala Ser Asp Pro His Gly Arg
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Trp Gly Leu Gly Ala His Asn Phe Cys Arg Asn Pro Asp Gly Asp Val
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Gln Pro Trp Cys Tyr Val Ala Glu Thr Glu Glu Gly Ile Tyr Trp Arg
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Tyr Cys Asp Ile Pro Ser Cys His Met Pro Gly Tyr Leu Gly Cys Phe
        115                 120                 125
Val Asp Ser Gly Ala Pro Pro Ala Leu Ser Gly Pro Ser Gly Thr Ser
    130                 135                 140
Thr Lys Leu Thr Val Gln Val Cys Leu Arg Phe Cys Arg Met Lys Gly
145                 150                 155                 160
Tyr Gln Leu Ala Gly Val Glu Ala Gly Tyr Ala Cys Phe Cys Gly Ser
                165                 170                 175
Glu Ser Asp Leu Ala Arg Gly Arg Leu Ala Pro Ala Thr Asp Cys Asp
            180                 185                 190
Gln Ile Cys Phe Gly His Pro Gly Gln Leu Cys Gly Gly Asp Gly Arg
        195                 200                 205
Leu Gly Val Tyr Glu Val Ser Val Gly Ser Cys Gln Gly Asn Trp Thr
    210                 215                 220
Ala Pro Gln Gly Val Ile Tyr Ser Pro Asp Phe Pro Asp Glu Tyr Gly
225                 230                 235                 240
Pro Asp Arg Asn Cys Ser Trp Ala Leu Gly Pro Pro Gly Ala Ala Leu
                245                 250                 255
Glu Leu Thr Phe Arg Leu Phe Glu Leu Ala Asp Pro Arg Asp Arg Leu
            260                 265                 270
Glu Leu Arg Asp Ala Ala Ser Gly Ser Leu Leu Arg Ala Phe Asp Gly
        275                 280                 285
Ala Arg Pro Pro Pro Ser Gly Pro Leu Arg Leu Gly Thr Ala Ala Leu
    290                 295                 300
Leu Leu Thr Phe Arg Ser Asp Ala Arg Gly His Ala Gln Gly Phe Ala
305                 310                 315                 320
Leu Thr Tyr Arg Gly Leu Gln Asp Ala Ala Glu Asp Pro Glu Ala Pro
                325                 330                 335
Glu Gly Ser Ala Gln Thr Pro Ala Ala Pro Leu Asp Gly Ala Asn Val
            340                 345                 350
Ser Cys Ser Pro Arg Pro Gly Ala Pro Pro Ala Ala Ile Gly Gly Ala
        355                 360                 365
Val Cys Trp Leu Arg Glu Lys Gly Pro Arg Arg Trp Gly Leu Pro Gly
    370                 375                 380
Ala Pro Gly Glu Ala Gly Leu Cys Gly Thr Asn Ser Pro Glu Gly Trp
385                 390                 395                 400
Pro Cys Pro Ala Pro Pro Gly Thr Pro Arg Leu Arg Val Leu Pro Arg
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Ala Thr Gly Leu
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<210> 17622
<211> 2318
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (379)..(762)

<400> 17622
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gtctgtgtta aaacagctct gctgggctaa gacaggacag aagcagacag caggtggatg 180
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<211> 128
<212> PRT
<213> Homo sapiens

<400> 17623

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			20					25					30		
Ala	Gly	Val	Ser	Leu	Val	Ser	Gly	Arg	Trp	Cys	Ala	Trp	Trp	Pro	Glu
		35					40					45			
His	Cys	Ser	Glu	Ser	Met	Phe	Pro	Ser	Gln	His	Pro	Val	Leu	Ser	Ser
	50					55					60				
Asn	Leu	Ala	Asp	Ser	Ser	Gly	Gln	Gly	Arg	Ser	Pro	Ala	Gly	Ala	His
65					70					75					80
Pro	Ala	Leu	Cys	Pro	Phe	His	Lys	Ser	Pro	Trp	Phe	Pro	His	Phe	Pro
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Gln	Ile	Leu	Pro	Arg	Glu	Trp	Ser	Trp	Cys	Gly	Pro	Glu	Arg	Pro	Ala
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (68)..(1540)

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gtctcgctgt gacaaggacc tggatactct cagtggttac gctatgtgcc ttcctaattt 420
aaccagactc caaacctacc gctttgcaga gcaccggccg attctgtgtg tagagattaa 480
gccaaaatgt gggtttattc ctttctcgag tgatgtcacg catgagatga agcataaggt 540

ctgtcgatac tgcatgcacc agcacctcaa ggtagcaact gggaagtgga agcagatcag 600
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gagtttgctg caggaggcac agaacaactt gaagatattt aagaatggtg agctgattta 720
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<210> 17625
<211> 491
<212> PRT
<213> Homo sapiens

<400> 17625
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Arg Phe Leu Lys Phe Pro Pro Asn Arg Lys Lys Thr Ser Glu Glu Ile
35 40 45
Phe Gln His Leu Gln Asn Ile Val Asp Phe Gly Lys Asn Val Met Lys
50 55 60
Glu Phe Leu Gly Glu Asn Tyr Val His Tyr Gly Glu Val Val Gln Leu
65 70 75 80
Pro Leu Glu Phe Val Lys Gln Leu Cys Leu Lys Ile Gln Ser Glu Arg
85 90 95
Pro Glu Ser Arg Cys Asp Lys Asp Leu Asp Thr Leu Ser Gly Tyr Ala
100 105 110
Met Cys Leu Pro Asn Leu Thr Arg Leu Gln Thr Tyr Arg Phe Ala Glu
115 120 125
His Arg Pro Ile Leu Cys Val Glu Ile Lys Pro Lys Cys Gly Phe Ile
130 135 140
Pro Phe Ser Ser Asp Val Thr His Glu Met Lys His Lys Val Cys Arg
145 150 155 160
Tyr Cys Met His Gln His Leu Lys Val Ala Thr Gly Lys Trp Lys Gln
165 170 175
Ile Ser Lys Tyr Cys Pro Leu Asp Leu Tyr Ser Gly Asn Lys Gln Arg
180 185 190
Met His Phe Ala Leu Lys Ser Leu Leu Gln Glu Ala Gln Asn Asn Leu
195 200 205
Lys Ile Phe Lys Asn Gly Glu Leu Ile Tyr Gly Cys Lys Asp Ala Arg
210 215 220
Ser Pro Val Ala Asp Trp Ser Glu Leu Ala His His Leu Lys Pro Phe
225 230 235 240
Phe Phe Pro Ser Asn Gly Leu Ala Ser Gly Pro His Cys Thr Arg Ala
245 250 255
Val Ile Arg Glu Leu Val His Val Ile Thr Arg Val Leu Leu Ser Gly
260 265 270
Ser Asp Lys Gly Arg Ala Gly Thr Leu Ser Pro Gly Leu Gly Pro Gln
275 280 285
Gly Pro Arg Val Cys Glu Ala Ser Pro Phe Ser Arg Ser Leu Arg Cys
290 295 300
Gln Gly Lys Asn Thr Pro Glu Arg Ser Gly Leu Pro Lys Gly Cys Leu
305 310 315 320
Leu Tyr Lys Thr Leu Gln Val Gln Met Leu Asp Leu Leu Asp Ile Glu
325 330 335
Gly Leu Tyr Pro Leu Tyr Asn Arg Val Glu Arg Tyr Leu Glu Glu Phe
340 345 350
Pro Glu Glu Arg Lys Thr Leu Gln Ile Asp Gly Pro Tyr Asp Glu Ala
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Phe Tyr Gln Lys Leu Leu Asp Leu Ser Thr Glu Asp Asp Gly Thr Val
370 375 380
Ala Phe Ala Leu Thr Lys Val Gln Gln Tyr Arg Val Ala Met Thr Ala
385 390 395 400

0050150 - 0050300

Lys Asp Cys Ser Ile Met Ile Ala Leu Ser Pro Cys Leu Gln Asp Ala
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Ser Ser Asp Gln Arg Pro Val Val Pro Ser Ser Arg Ser Arg Phe Ala
420 425 430
Phe Ser Val Ser Val Leu Asp Leu Asp Leu Lys Pro Tyr Glu Ser Ile
435 440 445
Pro His Gln Tyr Lys Leu Asp Gly Lys Ile Val Asn Tyr Tyr Ser Lys
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Ser Glu Asp Cys Thr Leu Val Leu His Lys Val
485 490

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<210> 17626
<211> 3068
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (308)..(1408)

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<210> 17627
<211> 367
<212> PRT
<213> Homo sapiens

<400> 17627

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			20					25				30			
Ile	Ala	Ile	Thr	Asn	Gly	Ala	Thr	Ala	Glu	Asp	Arg	Met	Ile	Arg	Phe
		35					40					45			
Val	Glu	Tyr	Tyr	Leu	Thr	Ser	Phe	His	Glu	Gly	Arg	Lys	Gly	Ala	Ile
	50					55					60				
Ala	Lys	Lys	Pro	Tyr	Asn	Pro	Ile	Ile	Gly	Glu	Thr	Phe	His	Cys	Ser
65					70					75					80
Trp	Lys	Met	Pro	Lys	Ser	Glu	Val	Ala	Ser	Ser	Val	Phe	Ser	Ser	Ser
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Thr Gln Val Gly Ser Asp Cys Tyr Thr Val Arg Phe Val Ala Glu Gln
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Val Ser His His Pro Pro Val Ser Gly Phe Tyr Ala Glu Cys Thr Glu
    130                 135                 140
Arg Lys Met Cys Val Asn Ala His Val Trp Thr Lys Ser Lys Phe Leu
145                 150                 155                 160
Gly Met Ser Ile Gly Val Thr Met Val Gly Glu Gly Ile Leu Ser Leu
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Leu Glu His Gly Glu Glu Tyr Thr Phe Ser Leu Pro Cys Ala Tyr Ala
            180                 185                 190
Arg Ser Ile Leu Thr Val Pro Trp Val Glu Leu Gly Gly Lys Val Ser
        195                 200                 205
Val Asn Cys Ala Lys Thr Gly Tyr Ser Ala Ser Ile Thr Phe His Thr
    210                 215                 220
Lys Pro Phe Tyr Gly Gly Lys Leu His Arg Val Thr Ala Glu Val Lys
225                 230                 235                 240
His Asn Ile Thr Asn Thr Val Val Cys Arg Val Gln Gly Glu Trp Asn
                245                 250                 255
Ser Val Leu Glu Phe Thr Tyr Ser Asn Gly Glu Thr Lys Tyr Val Asp
            260                 265                 270
Leu Thr Lys Leu Ala Val Thr Lys Lys Arg Val Arg Pro Leu Glu Lys
        275                 280                 285
Gln Asp Pro Phe Glu Ser Arg Arg Leu Trp Lys Asn Val Thr Asp Ser
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Leu Arg Glu Ser Glu Ile Asp Lys Ala Thr Glu His Lys His Thr Leu
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Glu Glu Arg Gln Arg Thr Glu Glu Arg His Arg Thr Glu Thr Gly Thr
                325                 330                 335
Pro Trp Lys Thr Lys Tyr Phe Ile Lys Glu Gly Asp Gly Trp Val Tyr
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<210> 17628
<211> 2609
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (274)..(2505)

<400> 17628
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Phe Val Thr Gln Ser Cys Asn Thr Asp Cys Glu Leu Arg Trp His Val
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Ile Gly Lys Ser Glu Cys Ser Ser Gln Cys Gly Gln Gly Tyr Arg Thr
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Gln Val Asp Asp His Tyr Cys Gly Asp Gln Leu Lys Pro Pro Thr Gln
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Glu Leu Cys His Gly Asn Cys Val Phe Thr Arg Trp His Tyr Ser Glu
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Lys Gly Thr Lys Gln Arg Gln Val Trp Cys Gln Leu Asn Val Asp His
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Pro Cys Glu Leu His Thr Cys Ala Ser Trp Gln Val Gly Pro Trp Gly

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Asp Cys Phe Thr Pro Cys Gly Glu Trp Gln Ala Gly Asp Trp Ser Pro
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Cys Ser Ala Ser Cys Gly His Gly Lys Thr Thr Arg Gln Val Leu Cys
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Met Asn Tyr Gln Gln Pro Ile Asp Glu Asn Tyr Cys Asp Pro Glu Val
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Arg Pro Leu Met Glu Gln Glu Cys Ser Leu Ala Ala Cys Pro Pro Ala
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His Ser His Phe Pro Ser Ser Pro Val Gln Pro Ser Tyr Tyr Leu Ser
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Thr Asn Leu Pro Leu Thr Gln Lys Leu Glu Asp Asn Glu Asn Gln Val
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Lys Pro Pro Glu Leu Gln Gln Cys Gly Pro Gly Pro Cys Pro Gln Trp
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Lys Ser Arg Leu Val Ile Cys Gln Phe Pro Asn Gly Gln Ile Leu Glu
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Asp His Asn Cys Glu Ile Val Asn Lys Pro Pro Ser Val Ile Gln Cys
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His Met His Ala Cys Pro Ala Asp Val Ser Trp His Gln Glu Pro Trp
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Cys Asp Pro Glu Thr Ile Glu Thr Tyr Phe Leu Ser Leu Trp Ser Leu
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     50                  55                  60
Gly Met Ala Ile Lys Asp Leu Asn Ala Glu Leu Phe Asp Cys Lys Asp
 65                  70                  75                  80
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                 85                  90                  95
Val Tyr Pro Ala Gln Gly Gln Trp Pro Ala Pro Val Thr Lys Gln Pro
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Asp Ile Lys Asn Pro Lys Leu Thr Lys Asp His Gln Thr Thr Gly Ser
        115                 120                 125
Pro Ser Arg Lys Thr Ile Thr Ile Thr Val Lys Ser Val Thr Ser Asp
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Gly Gly Ala Val Ala Leu Val Thr Ile Ala Leu Leu Ala Leu Val Cys
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Trp Tyr Val His Arg Asn Gly Ser Leu Phe Ser Arg Asn Cys Ala Tyr
        275                 280                 285
Ser Lys Gly Arg Arg Arg Lys Asp Asp Tyr Ala Glu Ala Gly Thr Lys
    290                 295                 300
Lys Asp Asn Ser Ile Leu Glu Ile Arg Glu Thr Ser Phe Gln Met Leu
305                 310                 315                 320
Pro Ile Ser Asn Glu Pro Ile Ser Lys Glu Glu Phe Val Ile His Thr
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Ile Phe Pro Pro Asn Gly Met Asn Leu Tyr Lys Asn Asn His Ser Glu
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Ser Ser Ser Asn Arg Ser Tyr Arg Gly Ser Gly Ile Pro Asp Ser Asp
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<213> Homo sapiens

<220>
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<222> (222)..(1781)

<400> 17634

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<212> PRT
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35 40 45
Leu Leu Ser Leu His Lys Val Asp Pro Phe Tyr Arg Phe Arg Leu Ile
50 55 60
Gln Phe Tyr Glu Val Val Glu Ser Ser Leu Arg Ser Leu Ser Ser Ser
65 70 75 80
Ser Leu Arg Ala Leu His Gly Ala Phe Ser Met Leu Glu Thr Val Gly
85 90 95
Ile Asn Leu Phe Leu Tyr Pro Trp Lys Lys Glu Phe Arg Ser Ile Lys

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Glu Asp Ile Arg Ala Ile Leu Ser Cys Met Gly Tyr Thr Pro Glu Leu
    130                 135                 140
Gly Thr Ala Tyr Lys Leu Arg Glu Leu Val Glu Thr Leu Gln Val Lys
145                 150                 155                 160
Met Val Ser Phe Glu Leu Phe Leu Ala Lys Val Glu Cys Glu Gln Met
                165                 170                 175
Leu Glu Ile His Ser Gln Val Lys Asp Lys Gly Tyr Ser Glu Leu Asp
            180                 185                 190
Ile Val Ser Glu Arg Lys Ser Ser Ala Glu Asp Val Arg Gly Cys Ser
        195                 200                 205
Asp Ala Leu Arg Arg Arg Ala Glu Gly Arg Glu His Leu Thr Ala Ser
    210                 215                 220
Met Ser Arg Val Ala Leu Gln Lys Ser Ala Ser Glu Arg Ala Ala Lys
225                 230                 235                 240
Asp Tyr Tyr Lys Pro Arg Val Thr Lys Pro Ser Arg Ser Val Asp Ala
                245                 250                 255
Tyr Asp Ser Tyr Trp Glu Ser Arg Lys Pro Pro Leu Lys Ala Ser Leu
            260                 265                 270
Ser Leu Arg Lys Glu Pro Val Ala Thr Asp Val Gly Asp Asp Leu Lys
        275                 280                 285
Asp Glu Ile Ile Arg Pro Ser Pro Ser Leu Leu Thr Met Ala Ser Ser
    290                 295                 300
Pro His Gly Ser Pro Asp Val Leu Pro Pro Ala Ser Pro Ser Asn Gly
305                 310                 315                 320
Pro Ala Leu Leu Arg Gly Thr Tyr Phe Ser Thr Gln Asp Asp Val Asp
                325                 330                 335
Leu Tyr Thr Asp Ser Glu Pro Arg Ala Thr Tyr Arg Arg Gln Asp Ala
            340                 345                 350
Leu Arg Pro Asp Val Trp Leu Leu Arg Asn Asp Ala His Ser Leu Tyr
        355                 360                 365
His Lys Arg Ser Pro Pro Ala Lys Glu Ser Ala Leu Ser Lys Cys Gln
    370                 375                 380
Ser Cys Gly Leu Ser Cys Ser Ser Ser Leu Cys Gln Arg Cys Asp Ser
385                 390                 395                 400
Leu Leu Thr Cys Pro Pro Ala Ser Lys Pro Ser Ala Phe Pro Ser Lys
                405                 410                 415
Ala Ser Thr His Asp Ser Leu Ala His Gly Ala Ser Leu Arg Glu Lys
            420                 425                 430
Tyr Pro Gly Gln Thr Gln Gly Leu Asp Arg Leu Pro His Leu His Ser
        435                 440                 445
Lys Ser Lys Leu Ser Thr Thr Pro Thr Ser Arg Cys Gly Phe Cys Asn
    450                 455                 460
Arg Pro Gly Ala Thr Asn Thr Cys Thr Gln Cys Ser Lys Val Ser Cys
465                 470                 475                 480
Asp Ala Cys Leu Ser Ala Tyr His Tyr Asp Pro Cys Cys Lys Lys Ser
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Gln Leu Ser His Leu Val Tyr Arg
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<212> DNA
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<220>
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<222> (579)..(1751)

<400> 17636
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09509369.0-2905

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<211> 391
<212> PRT
<213> Homo sapiens

<400> 17637
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35 40 45
Glu Glu Lys Ala Lys Ser Tyr Ser Asn Ser His Glu Tyr Lys Gln Ala
50 55 60
Val His Glu Leu Val Arg Cys Val Ala Leu Thr Arg Ile Cys Tyr Gly
65 70 75 80
Asp Ser His Trp Lys Leu Ala Glu Ala His Val Asn Leu Ala Gln Gly
85 90 95
Tyr Leu Gln Leu Lys Gly Leu Ser Leu Gln Ala Lys Gln His Ala Glu
100 105 110
Lys Ala Arg Gln Ile Leu Ala Asn Ser Ile Val Pro Pro Tyr Ser Glu
115 120 125
Asn Thr Asp Val Phe Lys Phe Ser Ile Glu Leu Phe His Thr Met Gly
130 135 140
Arg Ala Leu Leu Ser Leu Gln Lys Phe Lys Glu Ala Ala Glu Asn Leu
145 150 155 160
Thr Lys Ala Glu Arg Leu Ser Lys Glu Leu Leu Gln Cys Gly Arg Ile
165 170 175
Ile Lys Glu Glu Trp Ile Glu Ile Glu Ala Arg Ile Arg Leu Ser Phe
180 185 190
Ala Gln Val Tyr Gln Gly Gln Lys Lys Ser Lys Glu Ala Leu Ser His
195 200 205
Tyr Gln Ala Ala Leu Glu Tyr Val Glu Ile Ser Lys Gly Glu Thr Ser
210 215 220
Arg Glu Cys Val Pro Ile Leu Arg Glu Leu Ala Gly Val Glu Gln Ala

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225                 230                 235                 240
Leu Gly Leu His Asp Val Ser Ile Asn His Phe Leu Gln Ala His Leu
                245                 250                 255
Ile Ile Leu Ser Arg Ser Pro Ser Gln Val Glu Ala Ala Asp Ser Ala
            260                 265                 270
His Ile Val Ala His Ala Ala Val Ala Ser Gly Arg His Glu His His
        275                 280                 285
Asp Val Ala Glu Gln Tyr Phe Gln Glu Ser Met Ala His Leu Lys Asp
    290                 295                 300
Ser Glu Gly Met Gly Arg Thr Lys Phe Leu Ser Ile Gln Asp Glu Phe
305                 310                 315                 320
Cys His Phe Leu Gln Met Thr Gly Gln Lys Glu Arg Ala Thr Ser Ile
                325                 330                 335
Leu Arg Glu Ser Leu Glu Ala Lys Val Glu Ala Phe Gly Asp Phe Ser
            340                 345                 350
Pro Glu Val Ala Glu Thr Tyr Arg Leu Leu Gly Gly Ala Asp Leu Ala
        355                 360                 365
Gln Gly Asn His Ser Gly Ala Arg Lys Lys Leu Lys Lys Val Lys Leu
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Glu Pro Val Leu Thr Arg Asp
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<210> 17638
<211> 2510
<212> DNA
<213> Homo sapiens

<220>
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<400> 17638

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<212> PRT
<213> Homo sapiens

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35 40 45
Cys Ala Asp Glu Thr Ser Thr Tyr Ser Ser Lys Leu Met Asp Lys Gln
50 55 60
Thr Phe Cys Ser Ser Gln Thr Thr Ser Asn Thr Ser Arg Tyr Ala Ala
65 70 75 80
Ala Leu Tyr Arg Gln Gly Glu Leu His Leu Thr Pro Leu His Gly Ile
85 90 95
Leu Gln Leu Arg Pro Ser Phe Ser Tyr Leu Asp Lys Ala Asp Ala Lys

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Glu Ala Glu Asp Asp Val Lys Gln Ile Thr Val Arg Phe Ser Arg Pro
    130                 135                 140
Glu Ser Glu Gln Ala Arg Gln Arg Arg Val Gln Ser Tyr Glu Phe Leu
145                 150                 155                 160
Gln Lys Lys His Ala Glu Glu Pro Trp Val His Leu His Tyr Tyr Gly
                165                 170                 175
Leu Arg Asp Ser Arg Ser Glu His Glu Arg Gln Tyr Leu Leu Cys Pro
            180                 185                 190
Gly Ser Ser Gly Val Glu Asn Thr Glu Leu Val Lys Ser Pro Ser Glu
        195                 200                 205
Tyr Leu Met Met Leu Met Pro Pro Ser Gln Glu Glu Glu Lys Asp Lys
    210                 215                 220
Pro Val Ala Pro Ser Asn Val Leu Ser Met Ala Gln Leu Arg Thr Leu
225                 230                 235                 240
Pro Leu Ala Asp Gln Ile Lys Ile Leu Met Lys Asn Val Lys Val Met
                245                 250                 255
Pro Phe Ala Asn Leu Met Ser Leu Leu Gly Pro Ser Ile Asp Ser Val
            260                 265                 270
Ala Val Leu Arg Gly Ile Gln Lys Val Ala Met Leu Val Gln Gly Asn
        275                 280                 285
Trp Val Val Lys Ser Asp Ile Leu Tyr Pro Lys Asp Ser Ser Ser Pro
    290                 295                 300
His Ser Gly Val Pro Ala Glu Val Leu Cys Arg Gly Arg Asp Phe Val
305                 310                 315                 320
Met Trp Lys Phe Thr Gln Ser Arg Trp Val Val Arg Lys Glu Val Ala
                325                 330                 335
Thr Val Thr Lys Leu Cys Ala Glu Asp Val Lys Asp Phe Leu Glu His
            340                 345                 350
Met Ala Val Val Arg Ile Asn Lys Gly Trp Glu Phe Ile Leu Pro Tyr
        355                 360                 365
Asp Gly Glu Phe Ile Lys Lys His Pro Asp Val Val Gln Arg Gln His
    370                 375                 380
Met Leu Trp Thr Gly Ile Gln Ala Lys Leu Glu Lys Val Tyr Asn Leu
385                 390                 395                 400
Val Lys Glu Thr Met Pro Lys Lys Pro Asp Ala Gln Ser Gly Pro Ala
                405                 410                 415
Gly Leu Val Cys Gly Asp Gln Arg Ile Gln Val Ala Lys Thr Lys Ala
            420                 425                 430
Gln Gln Asn His Ala Leu Leu Glu Arg Glu Leu Gln Arg Arg Lys Glu
        435                 440                 445
Gln Leu Arg Val Pro Ala Val Pro Pro Gly Val Arg Ile Lys Glu Glu
    450                 455                 460
Pro Val Ser Glu Glu Gly Glu Glu Asp Glu Glu Gln Glu Ala Glu Glu
465                 470                 475                 480
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Phe Val Glu Ala Thr Phe Gln Arg Gln Phe Val Leu Thr Leu Ser Glu
    530                 535                 540
Leu Lys Arg Leu Phe Asn Leu His Leu Ala Ser Leu Pro Pro Gly His
545                 550                 555                 560
Thr Leu Phe Ser Gly Ile Ser Asp Arg Met Leu Gln Asp Thr Val Leu
                565                 570                 575
Ala Ala Gly Cys Lys Gln Ile Leu Val Pro Phe Pro Pro Gln Thr Ala
            580                 585                 590
Ala Ser Pro Asp Glu Gln Lys Val Phe Ala Leu Trp Glu Ser Gly Asp
        595                 600                 605
Met Ser Asp Gln His Arg Gln Val Leu Leu Glu Ile Phe Ser Lys Asn
    610                 615                 620
Tyr Arg Val Arg Arg Asn Met Ile Gln Ser Arg Leu Thr Gln Glu Cys
625                 630                 635                 640
Gly Glu Asp Leu Ser Lys Gln Glu Val Asp Lys Val Leu Lys Asp Cys
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (56)..(1915)

<400> 17640

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<212> PRT
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Ile Ser Leu Pro Asp Gly Gly Ser Cys Leu Cys Thr Ala Trp Pro Arg
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Ser Arg Pro Gly Glu Thr Glu Glu Asn Val Arg Arg Val Phe Gln Arg
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Glu Val Val Val Val Gly Ala Thr Asn Arg Pro Asp Ala Leu Asp Pro
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Ala Leu Arg Arg Pro Gly Arg Phe Asp Arg Glu Val Val Ile Gly Thr
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Pro Thr Leu Lys Gln Arg Lys Glu Ile Leu Gln Val Ile Thr Ser Lys
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Thr Leu Val Arg Ala Leu Ala Thr Ser Cys His Cys Ser Phe Val Ser
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Val Ser Gly Ala Asp Leu Phe Ser Pro Phe Val Gly Asp Ser Glu Lys
    530                 535                 540
Val Leu Ser Gln Ile Phe Arg Gln Ala Arg Ala Ser Thr Pro Ala Ile
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Lys Thr Gly Cys Asp Val Gln Glu Arg Val Leu Ser Val Leu Leu Asn
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Ile Gln Tyr Arg Asp Glu Glu Asp Glu Asp Glu Ser Tyr Gln Ser Ala
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225 230 235 240
Ser Lys Glu Glu Trp Asn Glu Ile Arg His Gln Ile Gly Asn Thr Leu
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260 265 270
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Met Val Ile Arg Pro His Lys Ser Phe Asp Glu Asn Gly Phe Asp Tyr
    50                  55                  60
Leu Leu Thr Tyr Ser Asp Asn Pro Gln Thr Val Phe Pro Arg Tyr Cys
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Val Ser Trp Met Val Ser Ser Gly Met Pro Asp Phe Leu Glu Lys Leu
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Tyr Ile Ser Ala Lys Pro Leu Glu Met Ser Ser Glu Ala Lys Ala Thr
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<400> 17646

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Thr Gly Lys Gln Pro Asp Gly Ser Ala Glu Lys Ala Val Leu Glu Gln
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Arg Ile Glu Met Tyr Cys Arg Glu Leu Thr Glu Arg Phe Glu Asp Val
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Trp Val Val Ser Gly Pro Leu Thr Leu Pro Gln Thr Arg Gly Asp Gly
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<400> 17652

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0095/2045 09/25/2009

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Lys His Ser Phe Thr Glu Asp His Tyr Val Glu Phe Ser Lys His Ser
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Asn Gly Leu Glu Val Ile Ile Asn Thr Glu Ile Trp Asp Leu Arg Thr
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Phe Asn His Thr Gly Thr Val Met Tyr Gly Ala Met Leu Gln Ala Asp
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Ser Phe Arg Thr Phe Asn Ala Thr Asp Tyr Lys Pro Ile Ala Thr Ile
225                 230                 235                 240
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Pro Phe Leu Asp Lys Ile Tyr Gln Glu Asp Ile Phe Pro Cys Leu Thr
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<400> 17656

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<212> PRT
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<400> 17658

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<212> DNA
<213> Homo sapiens

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<400> 17661

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Ile Asp His Leu Ala Val Asn Asp Val Met Leu Glu Ser Leu Arg Gly
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Val Ala Ala Asp Val Arg Thr Phe Ser Glu Gly Tyr Ile Lys Ala Ile
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225                 230                 235                 240
His Thr Lys Leu Cys Leu Glu Lys Pro Leu Gly Pro Ser Val Leu Arg
                245                 250                 255
His Ala Gln Gln Gly Gly Phe Ser Val Lys Ser Leu Gly Asp Leu Met
            260                 265                 270
Glu Leu Val Phe Leu Ser Leu Thr Leu Ser Asp Leu Pro Val Ile Asp
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35 40 45
Pro Arg Pro Gln Ile Pro Ala Thr Cys Glu Pro Gly Lys Val Cys Gly
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Arg Trp Gly Leu Arg Gly Gly Pro Glu Ser Val Arg Gly Leu Pro His
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Thr Gly Lys Ser Tyr Val Ser Ser Leu Leu Ala His Tyr Leu Phe Gln
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<213> Homo sapiens

<400> 17671

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<212> DNA
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Leu Cys Val Cys Ile Phe Val Phe Val Phe Val Leu Arg Trp Ser Phe
35 40 45
Thr Val Val Thr Gln Ala Arg Val Gln Trp His His Leu Ser Ser Leu
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Gln Pro Pro Pro Pro Gly Phe Lys Arg Phe Ser Cys Pro Ser Leu Leu
65 70 75 80

Ser Cys Trp Asp Tyr Arg Cys Leu Pro Pro Ser Val Ala Asn Phe Gly
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145 150 155 160
Pro Pro His Arg Cys Ala Gln Cys Pro Arg Ala Phe Arg Ser Gly Ala
165 170 175
Gly Leu Arg Ser His Ala Arg Ile His Val Ser Arg Ser Pro Thr Arg
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Pro Arg Val Ser Asp Ala His Gln Cys Gly Val Cys Gly Lys Cys Phe
195 200 205
Gly Lys Ser Ser Thr Leu Thr Arg His Leu Gln Thr His Ser Gly Glu
210 215 220

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260 265 270
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Gly Lys Gly Phe Gly Gln Arg Ser Asp Leu Val Val His Gln Arg Ile
290 295 300
His Thr Gly Glu Lys Pro Phe Ala Cys Pro Glu Cys Gly Arg Arg Phe
305 310 315 320
Ser Asp Arg Ser Asp Leu Thr Lys His Arg Arg Thr His Thr Gly Glu
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Lys Pro Tyr Arg Cys Glu Leu Cys Gly Lys Arg Phe Thr Cys Val Ser
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0002950469 - 05 Dec 2008

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Gln Gly His Tyr Leu Val Val Arg Tyr Glu Asp Leu Val Gly Asp Pro
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465                 470                 475                 480
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<212> DNA
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<212> DNA
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<222> (1034)..(1954)

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His Tyr Val Cys Asn Glu Cys Gly Lys Glu Phe Thr Cys Phe Ser Lys
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Leu Asn Ile His Ile Arg Val His Thr Gly Glu Lys Pro Tyr Glu Cys
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Lys Ala Phe Ala Asn Ser Ser His Leu Thr Val His Met Arg Thr His
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Thr Gly Glu Lys Pro Tyr Gln Cys Lys Glu Cys Gly Lys Ala Phe Ile
145                 150                 155                 160
Asn Ser Ser Ser Phe Lys Ser His Met Gln Thr His Pro Gly Val Lys
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            180                 185                 190
Leu Ile Arg His Leu Arg Ser His Ser Ala Glu Arg Pro Phe Glu Cys
        195                 200                 205
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225                 230                 235                 240
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Thr Gly Glu Arg Pro Phe Glu Cys Gln Glu Cys Gly Lys Ala Phe Thr
            260                 265                 270
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Ser Glu Asp Lys Asn Lys Pro Phe Ser Arg Val Gln Lys Val Lys Phe
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Leu Glu Ala Gln Gly Asp Leu Leu Glu Thr Gln Gly Asp Leu Thr Gly
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Val Thr Glu Pro Glu Gly Gln Ala Ile Glu Pro Glu Gly Gln Pro Ile
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<400> 17687

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35 40 45
Ser Gly Asn Leu Arg Lys Val Val Met Lys Glu Asn Ile Ser Ser Lys
50 55 60
Gly Asp Glu Gly Glu Lys Lys Ser Thr Phe Val Asp Leu Ala Lys Glu
65 70 75 80
Asp Ile Lys Asp Asn Asp Arg Thr Leu Gln Gln Gln Pro Gly Asp Gln
85 90 95
Asn Arg Thr Ile Ser Ser Val His Gly Leu Asn Asn Asp Ile Val Lys
100 105 110
Ala Leu Asp Arg Ile Thr Leu Gln Asn Ile Pro Ser Gln Thr Ala Pro
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Val Glu Thr Glu Asp Asp Glu Asp Thr Glu Ser Asn Ser Ser Val Glu
            180                 185                 190
Gln Ala Ser Val Glu Val Pro Asp Gly Pro Thr Leu His Asp Pro Asp
        195                 200                 205
Leu Tyr Ile Glu Ile Val Lys Asn Thr Lys Ser Val Pro Glu Tyr Ser
    210                 215                 220
Glu Val Ala Tyr Pro Asp Tyr Phe Gly His Ile Pro Pro Pro Phe Lys
225                 230                 235                 240
Glu Pro Ile Leu Glu Arg Pro Tyr Gly Val Gln Arg Thr Lys Ile Ala
                245                 250                 255
Gln Asp Ile Glu Arg Leu Ile His Gln Ser Asp Ile Ile Asp Arg Val
            260                 265                 270
Val Tyr Asp Leu Asp Asn Pro Asn Tyr Thr Ile Pro Glu Glu Gly Asp
        275                 280                 285
Ile Leu Lys Phe Asn Ser Lys Phe Glu Ser Gly Asn Leu Arg Lys Val
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Arg Pro Gly Val Ala Tyr Arg Phe Asn Ile Ile Asn Cys Glu Lys Ser
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Glu Ala Leu Asn Ala Arg Pro Trp Trp Ile Arg Met Gly Thr Asp Ile
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Cys Tyr Tyr Lys Asn His Phe Pro Arg Ser Ser Val Ala Ala Gly Gly
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Gln Lys Gly Lys Ser Tyr Tyr Thr Ile Thr Phe Thr Val Asn Phe Pro
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His Lys Asp Asp Val Cys Tyr Phe Ala Tyr His Tyr Pro Tyr Thr Tyr
            420                 425                 430
Ser Thr Leu Gln Met His Leu Gln Lys Leu Glu Ser Ala His Asn Pro
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Gln Gln Ile Tyr Phe Arg Lys Asp Val Leu Cys Glu Thr Leu Ser Gly
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Lys Gly Leu Leu Gln Tyr Leu Ala Ala Val Lys Arg Leu Pro Leu Val
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Tyr Cys Asp Tyr His Gly His Ser Arg Lys Lys Asn Val Phe Met Tyr
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Val Glu Lys Ser Lys Glu Ser Thr Ala Arg Val Val Val Trp Arg Glu
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0050250-050800

<400> 17689

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Ile Ala Glu Val Glu Ile Pro Asn Ile Gln Lys Gln Arg Lys Gln Leu
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Asp Thr Leu Lys Glu Glu Met Asp Glu Ala Gly Asn Lys Val Glu Gln
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Cys Lys Asp Gln Leu Ala Ala Asp Met Tyr Asn Phe Met Ala Lys Glu
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Gly Glu Tyr Gly Lys Phe Phe Val Thr Leu Leu Glu Ala Gln Ala Asp
130 135 140
Tyr His Arg Lys Ala Leu Ala Val Leu Glu Lys Thr Leu Pro Glu Met
145 150 155 160
Arg Ala His Gln Asp Lys Trp Ala Glu Lys Pro Ala Phe Gly Thr Pro
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180 185 190
Glu Ala Cys Val Met Leu Leu Leu Glu Thr Gly Met Lys Glu Glu Gly
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Ala Leu Asp Cys Ser Thr Ser His Leu Asp Glu Phe Tyr Ser Asp Pro
225 230 235 240
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Pro Leu Met Thr Phe Asn Leu Tyr Glu Glu Trp Thr Gln Val Ala Ser
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Lys Leu Pro Pro Gln Asn Phe Val Asn Phe Arg Tyr Leu Ile Lys Phe

CA2389205 2002-05-09

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Asn Ala Ala Gly Pro Ser Pro His Thr Leu Arg Arg Ala Val Lys Lys
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Pro Gln Pro Pro Thr Gln Ala Thr Pro Leu Met His Thr Lys Pro Asn
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<220>
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Val	Leu	Leu	Val	Val	Asp	Ala	Asn	Glu	Gly	Ile	Gln	Ala	Gln	Thr	Val
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Cys Gly Gly Asp Ile Thr Arg Lys Met Lys Leu Leu Lys Arg Gln Ala
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<400> 17694

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         35                  40                  45
Ala Pro Ser Thr Ser Asn Ser Gln Ser Asp Leu Phe Ser Glu Glu Thr
     50                  55                  60
Thr Ser Asp Asn Asn Asn Thr Ser Ile Thr Thr Pro Thr Leu Ser Pro
 65                  70                  75                  80
Ser Gln Gln Pro Leu Pro Thr Glu Leu Asn Val Thr Ser Pro Ser Lys
                 85                  90                  95
Glu Glu Cys Gly Pro Cys Thr Asp Thr Ala His Val Ser Leu Ile Thr
            100                 105                 110
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Ser Pro Val Lys Arg Pro Arg Leu Leu Glu Asn Thr Glu Arg Ser Glu
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Glu Thr Ser Arg Ser Lys Gln Lys Ser Arg Arg Arg Cys Phe Gln Cys
145                 150                 155                 160
Gln Thr Lys Leu Glu Leu Val Gln Gln Glu Leu Gly Ser Cys Arg Cys
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Gly Tyr Val Phe Cys Met Leu His Arg Leu Pro Glu Gln His Asp Cys
            180                 185                 190
Thr Phe Asp His Met Gly Arg Gly Arg Glu Glu Ala Ile Met Lys Met
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Val Lys Leu Asp Arg Lys Val Gly Arg Ser Cys Gln Arg Ile Gly Glu
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<400> 17698

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Glu Lys Phe Ile Leu Pro Glu Gly Ala Ser Gln Gly Met Thr Pro Phe
         35                  40                  45
Arg Ser Arg Gly Arg Arg Ser Lys Pro Ser Ser Arg Ala Ala Ser Pro
     50                  55                  60
Thr Arg Ser Ser Ser Ser Ala Ser Gln Ser Asn His Ser Cys Thr Ser
 65                  70                  75                  80
Met Pro Ser Ser Pro Ala Thr Pro Ala Ser Gly Thr Lys Thr Ser Leu
                 85                  90                  95
Gln Phe Ser Arg Cys Tyr Asp Lys Pro Trp Leu Val Asn Ser Lys Ala
            100                 105                 110
Gly Thr Pro Ile Arg Asp Ser His Ser Pro Asp Leu Gln Leu Pro Thr
        115                 120                 125
Pro Glu Val Ile Pro Ser Ser Gly Ser Lys Leu Lys Arg Pro Thr Pro
    130                 135                 140
Thr Phe His Ser Ser Arg Thr Ser Leu Ala Gly Asp Thr Ser Asn Ser
145                 150                 155                 160
Ser Ser Pro Ala Ser Thr Gly Ala Lys Thr Asn Arg Ala Gly Lys Tyr
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<400> 17699

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Pro Arg Gly Ala Gly His Ser Asp Lys Asp Gln Gly Arg Ser Pro Lys
50 55 60
His Val Val Cys His Val Glu His Lys Lys Gln Cys Pro Ala Glu Phe
65 70 75 80
Thr Asp Ser Arg Gly Val His Asn Ala Ala Ala Ser Ile Ser Ser Gln
85 90 95

0095949 - 0095950

Val Gly Phe Pro Gly His Leu Thr Ala Arg Thr Ala Ala His Lys Arg
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Glu Ala Leu Ala Val Ser Pro Thr Pro Thr Leu Gln Val Asn Ala Pro
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Gly Arg Gly Pro Lys Arg Ala Gly Glu Trp Lys Thr Gly Cys Phe
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<212> DNA
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<211> 271
<212> PRT
<213> Homo sapiens

<400> 17702
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Arg Gln Val Gly Ser Val Leu Gly Pro Ser Pro Gly Gly Gly Ala Glu
35 40 45
Gly Gly Gln Ala Pro Val Gln Ser Trp Leu Trp Val Val Gly Gly Ser
50 55 60
Gly Ser Gln Val Arg Arg Met Thr Ala Val Leu Val Gly His Gly Arg
65 70 75 80
Leu Trp Val Thr Gly Thr Glu Asp Asp Gly Cys Ala Gly Gly Ser Arg
85 90 95
Ala Ala Leu Gly His Arg Trp Leu Trp Val Thr Gly Thr Glu Asp Asp
100 105 110
Gly Cys Ala Gly Gly Arg Gly Ala Gly Gly Phe Gly Thr Cys Pro Gly
115 120 125
Glu Asp Asp Ser Gly Glu Pro Arg Ser Pro Gly Gln Ala Pro Asp Thr
130 135 140
Cys Ser Pro Ser Pro Arg Leu Ile Pro Gln Val Ser Ala Val Arg Glu
145 150 155 160
Pro Arg Cys Cys Leu Leu His Pro Ala Gly Ala Thr Val Arg Glu Pro
165 170 175
Arg Met Thr Leu Asp Thr Gln Ala Lys Val Arg Pro His Gln Ala Gln
180 185 190
Pro Cys Ala Gly Gln Ala Arg Ala Val Thr Ala Ala Trp Gly Pro Gln
195 200 205
His Cys Cys Leu Val Ser Thr Val Ala Ser Leu Pro Gly Ser Gln His
210 215 220
Pro Gly Cys Pro Ser Leu Ser Gln Ala Gly Trp Gly Thr Val Gln Asp
225 230 235 240
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<212> PRT
<213> Homo sapiens

<400> 17704

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Pro Ser Leu Gln Asp Thr Gln Cys Met Leu Ile Ala His His Lys Pro
        35                  40                  45
Gly Ser Gly Asp Asp Lys Gly Ser Leu Ser Leu Ser Pro Pro Leu Asn
    50                  55                  60
Lys Leu Lys Leu Val His Ser Asn Leu Glu Asp Asp Pro Glu Glu Ile
65                  70                  75                  80
Arg Met Glu Phe Ile Lys Tyr Leu Lys Ser Ile Ile Asn Ser Met Ser
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<400> 17705

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0050-0050-0050-

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0505050-0N2880

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<213> Homo sapiens

<400> 17707

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         35                  40                  45
His Thr Ala Thr Arg Ser Gln Met Ala Thr Ser Leu Asp Phe Lys Thr
     50                  55                  60
Tyr Val Asp Gln Ala Cys Arg Ala Ala Glu Glu Phe Val Asn Ile Tyr
 65                  70                  75                  80
Tyr Glu Thr Met Asp Lys Arg Arg Arg Ala Leu Thr Arg Leu Tyr Leu
                 85                  90                  95
Asp Lys Ala Thr Leu Ile Trp Asn Gly Asn Ala Val Ser Gly Leu Asp
            100                 105                 110
Ala Leu Asn Asn Phe Phe Asp Thr Leu Pro Ser Ser Glu Phe Gln Val
        115                 120                 125
Asn Met Leu Asp Cys Gln Pro Val His Glu Gln Ala Thr Gln Ser Gln
    130                 135                 140
Thr Thr Val Leu Val Val Thr Ser Gly Thr Val Lys Phe Asp Gly Asn
145                 150                 155                 160
Lys Gln His Phe Phe Asn Gln Asn Phe Leu Leu Thr Ala Gln Ser Thr
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Pro Asn Asn Thr Val Trp Lys Ile Ala Ser Asp Cys Phe Arg Phe Gln
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Asp Trp Ser Ser Ser
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<212> DNA
<213> Homo sapiens

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<222> (1519)..(1938)

<400> 17708
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<210> 17709

0950250-050800

<211> 140
<212> PRT
<213> Homo sapiens

<400> 17709

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             20                  25                  30
Val Tyr Asn Ile Ile Gly Gly Leu Asp Glu Glu Gly Lys Gly Ala Val
         35                  40                  45
Tyr Ser Phe Asp Pro Val Gly Ser Tyr Gln Arg Asp Ser Phe Lys Ala
     50                  55                  60
Gly Gly Ser Ala Ser Ala Met Leu Gln Pro Leu Leu Asp Asn Gln Val
 65                  70                  75                  80
Gly Phe Lys Asn Met Gln Asn Val Glu His Val Pro Leu Ser Leu Asp
                 85                  90                  95
Arg Ala Met Arg Leu Val Lys Asp Val Phe Ile Ser Ala Ala Glu Arg
            100                 105                 110
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<213> Homo sapiens

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<222> (12)..(542)

<400> 17710

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0560260-0560260

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<210> 17711
<211> 177
<212> PRT
<213> Homo sapiens

<400> 17711

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			20					25				30			
Cys	Ser	Pro	Cys	Lys	Leu	Phe	Pro	Pro	His	Gly	Ser	Leu	Asp	Glu	Ser
		35					40					45			
Asn	Lys	Thr	Gly	Met	Glu	Pro	Asp	Leu	Thr	Asp	Gly	Glu	Ala	Glu	Ala
	50					55					60				
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65					70					75					80
Gly	Val	Thr	Gly	Arg	Lys	Pro	Gly	Thr	Trp	Ser	Asn	His	Leu	Thr	Leu
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Gln	Met	Gly	Asn	Ser	Trp	Arg	Tyr	Arg	Lys	Trp	Gln	Ser	Thr	Ile	Ser
			100					105					110		
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		115					120					125			
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	130					135					140				
Glu	Tyr	Leu	Thr	Ala	Glu	Trp	Met	Ala	Leu	Val	Lys	Ala	Gly	Leu	Phe
145					150					155					160
Pro	Pro	Thr	Ser	Thr	His	Lys	Val	Ser	Ser	Trp	Glu	Ala	Gly	Lys	Thr
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US 2005/0260609 A1

<210> 17712
<211> 2656
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (229)..(540)

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<211> 104
<212> PRT
<213> Homo sapiens

<400> 17713
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20 25 30
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35 40 45
Met Val Cys His Arg Leu Ser Phe Tyr Thr Val Gly Ile Asn Gln Gln
50 55 60
Glu Ile Ile Met Gln Thr Ala Tyr Thr Leu Lys Asn Phe Ser Gly Thr
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85 90 95
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<212> DNA
<213> Homo sapiens

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0950250 "0950250"

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<211> 228
<212> PRT
<213> Homo sapiens

<400> 17715
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His Cys Pro Ser Pro Arg Gly Glu Asn Gln His Gly His Ser Phe Leu
35 40 45
Ile Asn Arg Pro Gly Lys Val Lys Tyr Met Ser Lys Pro Ser Tyr Ile
50 55 60
His Lys Arg Lys Ser Phe Gly Gln Pro Gln Gly Ser Pro Trp Pro His
65 70 75 80
Gly Thr Ala Thr Phe Thr Ile Gln Lys Lys Ala Gly Gly Ala Lys Ala
85 90 95
Ala Val Arg Lys Ala Thr Gln Ser Pro Val Thr Phe Gln Lys Gly Ser

09609300.0702000

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            100                 105                 110
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        115                 120                 125
Gly Leu Ala Pro Gln Thr Lys Gln Val Cys Val Glu Tyr Glu Arg Glu
    130                 135                 140
Glu Thr Val Val Ser Pro Trp Thr Ile Pro Ser Glu Ile His Lys Ile
145                 150                 155                 160
Leu His Glu Ser His Asn Ser Leu Leu Gln Asp Leu Ser Pro Thr Glu
                165                 170                 175
Glu Glu Glu Pro Glu His Pro Phe Gly Val Gly Gly Val Asp Ser Val
            180                 185                 190
Ser Glu Ser Thr Gly Ser Ile Leu Ser Lys Leu Asp Trp Asn Ala Ile
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225
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0050250-0050505

<210> 17716
<211> 1618
<212> DNA
<213> Homo sapiens

<400> 17716

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	50					55					60				
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Phe	Ser	His	Pro	Ala	Leu	Thr	Ser	Pro	Ala	Gly	Val	Lys	Ala	Gly	Asn
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Pro	Gly	Ser	Pro	Arg	Ser	Ser	Ser	Cys	Cys	Glu	His	His	Arg	Lys	Ala
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<212> PRT
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Asp Arg Met Gly Thr Gln Leu Asn Val Ala Cys Lys Leu Ser Asn Asn
        115                 120                 125
Arg Ile Ser Lys Arg Glu His Phe Arg Pro Thr Gln Ser Tyr Ser His
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Thr Pro Lys Asp Asn Met Ser Ile Pro Leu Val Ser Lys Glu Ala Leu
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Pro Val Lys Leu Ala Gly Pro Gly Gln Arg Glu Gln Val Ala Arg Pro
        195                 200                 205
Ala His Lys Lys Lys Ala Arg Met Ala Arg Thr Arg Ser Asp Phe Leu
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Thr Arg Gly Thr Phe Ala Asp Gly Glu Gly Asp Thr Glu Glu Asp Asp
225                 230                 235                 240
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Cys Glu Leu Gly Pro Ala Pro Ser Leu Gly Gln Ala Ser His Ser Asp
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Ser Glu Met Thr Ser Gln Arg Phe Ser Ser Val Asp Glu Gln Ala Lys
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Thr Met Arg Leu Glu Gln Arg Asp Ser Leu Gly Glu Ser Pro Val Arg
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<212> PRT
<213> Homo sapiens

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35 40 45
Ala Trp Trp Leu Cys Val Val Gly Leu Leu Gly Ala Cys Gly Leu Gly
50 55 60
Met Asp Ala Val Glu Asp Thr Pro Cys Ala Arg Leu Ala Gly Ala Arg
65 70 75 80
Ala Asp Arg Val Asp Arg Ala Trp Thr Phe Trp Met Lys Ser Gln Trp
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<212> PRT
<213> Homo sapiens

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35 40 45
Arg Leu Gly Ser Gly Thr Arg Gly Ala Gly Met Glu Leu Gly Cys Pro
50 55 60
Trp Ala Pro Ser Trp Ala Gly Ala His Pro Gly Arg Val Val Thr Gly
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<212> DNA
<213> Homo sapiens

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<212> PRT
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<400> 17738

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<212> DNA
<213> Homo sapiens

<400> 17739

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Thr Lys Val Ala His Val Pro Val Gln Val Trp His Gly Phe Asp Pro
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            100                 105                 110
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Gln Phe Val Gly Val Asn Gly Gly Tyr Glu Ser Ser Ser Glu Asp Ser
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Arg Asp Gly Ser Thr Ala Leu Met Val Ala Leu Asp Ala Gly Gln Ser
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<212> DNA
<213> Homo sapiens

<400> 17750

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<213> Homo sapiens

<400> 17752

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         35                  40                  45
Cys Asn Phe Pro Val Lys Val Ser Val Thr Leu Thr Ser Leu Ser Phe
     50                  55                  60
Phe Asn His His Leu Ser Phe Leu Thr Phe His Ile Leu Asn Asn Phe
 65                  70                  75                  80
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<212> DNA
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<212> DNA
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<212> PRT
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<400> 17755
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Val Leu Glu Cys Lys Lys Ala Thr Asn Lys Ala Ala Glu Glu Gly Gln
50 55 60
Lys Ala Gly Glu Leu Ser Leu Lys Leu Glu Lys Glu Lys Ser Arg Val
65 70 75 80
Ser Lys Leu Glu Glu Glu Leu Ala Ala Glu Arg Lys Arg Gly Leu Gln
85 90 95
Thr Glu Ala Gln Val Glu Lys Gln Leu Ser Glu Phe Asp Ile Glu Arg
100 105 110
Glu Gln Leu Arg Ala Lys Leu Asn Arg Glu Glu Asn Arg Thr Lys Thr
115 120 125
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130 135 140
Ala Ser His Gln His Ser Ser Pro Asn Glu Gln Leu Lys Lys Pro Val
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Thr Val Ser Lys Gly Thr Ala Thr Glu Pro Leu Met Leu Met Ser Val
165 170 175
Phe Cys Gln Thr Glu Ser Phe Pro Ala Glu Arg Thr His Gly Ser Asn
180 185 190

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    210                 215                 220
Thr Arg Glu Leu Thr Ala Gly Asn Asn Val Glu Asn Gln Val Pro Pro
225                 230                 235                 240
Arg Glu Lys Ser Val Ala Leu Ala Gln Glu Lys Pro Val Glu Asn Gly
                245                 250                 255
Gly Cys Pro Val Gly Ile Glu Thr Pro Val Pro Met Pro Ser Pro Leu
            260                 265                 270
Ser Ser Ser Gly Ser Ser Leu Ser Pro Ser Ser Thr Ala Ser Ser Ser
        275                 280                 285
Leu Thr Ser Ser Pro Cys Ser Ser Pro Val Leu Thr Lys Arg Leu Leu
    290                 295                 300
Gly Ser Ser Ala Ser Ser Pro Gly Tyr Gln Ser Ser Tyr Gln Val Gly
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50 55 60
Leu Leu Asp Gly Leu Lys Ser Gly Thr Thr Ile Ala Leu Lys Val Gly
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Cys Leu Gln Leu Ile Asn Ala Leu Ile Thr Pro Ala Glu Glu Leu Asp
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100 105 110
Val Leu Gln Asp Leu Arg Glu Ile Glu Asn Glu Asp Met Arg Val Gln
115 120 125
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130 135 140
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145 150 155 160
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Ala Arg Pro Gln Tyr Tyr Lys Leu Ile Glu Glu Cys Ile Ser Gln Ile

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225                 230                 235                 240
Val Glu Lys Ser Glu Ala Lys Ala Ala Glu Leu Glu Lys Lys Leu Asp
                245                 250                 255
Ser Glu Leu Thr Ala Arg His Glu Leu Gln Val Glu Met Lys Lys Met
            260                 265                 270
Glu Ser Asp Phe Glu Gln Lys Leu Gln Asp Leu Gln Gly Glu Lys Asp
        275                 280                 285
Ala Leu His Ser Glu Lys Gln Gln Ile Ala Thr Glu Lys Gln Asp Leu
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Glu Ala Glu Val Ser Gln Leu Thr Gly Glu Val Ala Lys Leu Thr Lys
305                 310                 315                 320
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<212> DNA

0560260 - 050200

<213> Homo sapiens

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Asp Ser Arg Pro Val Ser Arg Arg Leu Val Ser Leu Ile Phe Asn Ser
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Phe Leu Pro Val Asn Gln Pro Glu Glu Val Trp Cys Glu Arg Cys Val
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Thr Leu Val Gln Met Asn His Ala Ala Ala Arg Arg Phe Tyr Gln Tyr
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Pro Glu Asp Glu Glu Glu Glu Asp Gly Arg Glu Lys Glu Asn Val Thr
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225                 230                 235                 240
Phe Ser Cys Gly Val Ile Ser Thr Leu Arg Ser Arg Glu Glu Gly Ala
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Val Asp Lys Ser Tyr Cys Thr Leu Leu Asp Cys Leu Cys Ser Trp Gly
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Gln Val Gly His Ile Leu Glu Leu Val Asp Asn Trp Leu Pro Thr Glu
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His Ala Gln Ala Lys Ser Asn Thr Ala Ser Lys Gly Arg Val Gln Ile
    290                 295                 300
His Asp Thr Arg Pro Val Lys Pro Glu Leu Ala Leu Val Tyr Ile Glu
305                 310                 315                 320
Tyr Leu Leu Thr His Pro Lys Asn Arg Glu Cys Leu Leu Ser Ala Pro
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Arg Lys Lys Leu Asn His Leu Leu Lys Ala Leu Glu Thr Ser Lys Ala
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Asp Leu Glu Ser Leu Leu Gln Thr Pro Gly Gly Lys Pro Arg Gly Phe
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Gly Val Leu Ser Thr Leu Ile Ala Gly Pro Val Val Glu Ile Ser His
565 570 575
Gln Leu Arg Lys Val Ser Asp Val Glu Glu Leu Thr Pro Pro Glu His
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Lys Ser Ser Asn Val Val Arg Ser Phe Leu Asp Glu Leu Lys Ala Cys
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His Ile Ile Leu Val Ile Asn Ala Gly Lys His Lys Ser Ser Lys Val
645 650 655
Arg Glu Val Ala Ala Thr Val His Arg Lys Leu Lys Thr Phe Met Glu
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0560250-050300

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<212> PRT
<213> Homo sapiens

<400> 17777

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        35                  40                  45
Val Met Glu Phe His Val Ser Glu Asp Phe Asn Lys Met Asn Phe Ile
    50                  55                  60
Lys Thr Tyr Pro Ala His Gln Asn Arg Val Ser Ala Ile Ile Phe Ser
65                  70                  75                  80
Leu Ala Thr Glu Trp Val Ile Ser Thr Gly His Asp Lys Cys Val Ser
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Trp Met Cys Thr Arg Ser Gly Asn Met Leu Gly Arg His Phe Phe Thr
            100                 105                 110
Ser Trp Ala Ser Cys Leu Gln Tyr Asp Phe Asp Thr Gln Tyr Ala Phe
        115                 120                 125
Val Gly Asp Tyr Ser Gly Gln Ile Thr Leu Leu Lys Leu Glu Gln Asn
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Thr Cys Ser Val Ile Thr Thr Leu Lys Gly His Glu Gly Ser Val Ala
145                 150                 155                 160
Cys Leu Trp Trp Asp Pro Ile Gln Arg Leu Leu Phe Ser Gly Ala Ser
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Asp Asn Ser Ile Ile Met Trp Asp Ile Gly Gly Arg Lys Gly Arg Thr
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Leu Leu Leu Gln Gly His His Asp Lys Val Gln Ser Leu Cys Tyr Leu
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Gln Leu Thr Arg Gln Leu Val Ser Cys Ser Ser Asp Gly Gly Ile Ala
    210                 215                 220
Val Trp Asn Met Asp Val Ser Arg Glu Glu Ala Pro Gln Trp Leu Glu
225                 230                 235                 240
Ser Asp Ser Cys Gln Lys Cys Glu Gln Pro Phe Phe Trp Asn Ile Lys
                245                 250                 255
Gln Met Trp Asp Thr Lys Thr Leu Gly Leu Arg Gln His His Cys Arg
            260                 265                 270
Lys Cys Gly Gln Ala Val Cys Gly Lys Cys Ser Ser Lys Arg Ser Ser
        275                 280                 285
Tyr Pro Val Met Gly Phe Glu Phe Gln Val Arg Val Cys Asp Ser Cys
    290                 295                 300
Tyr Asp Ser Ile Lys Asp Glu Asp Arg Thr Ser Leu Ala Thr Phe His
305                 310                 315                 320
Glu Gly Lys His Asn Ile Ser His Met Ser Met Asp Ile Ala Arg Gly
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0050294-0050800

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<212> DNA
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         35                  40                  45
His Gln Asn Ile His Pro Glu Asn Gln Glu Leu Val Arg Val Leu Arg
     50                  55                  60
Glu Gln Leu Gln Thr Glu Gln Asp Ala Pro Ala Ala Thr Arg Gln Gln
 65                  70                  75                  80
Phe Tyr Thr Asp Met Tyr Cys Pro Ile Cys Leu His Gln Ala Ser Phe
                 85                  90                  95
Pro Val Glu Thr Asn Cys Gly His Leu Phe Cys Gly Ala Cys Ile Ile
            100                 105                 110
Ala Tyr Trp Arg Tyr Gly Ser Trp Leu Gly Ala Ile Ser Cys Pro Ile
        115                 120                 125
Cys Arg Gln Thr Val Thr Leu Leu Leu Thr Val Phe Gly Glu Asp Asp
    130                 135                 140
Gln Ser Gln Asp Val Leu Arg Leu His Gln Asp Ile Asn Asp Tyr Asn
145                 150                 155                 160
Arg Arg Phe Ser Gly Gln Pro Arg Ser Ile Met Glu Arg Ile Met Asp
                165                 170                 175
Leu Pro Thr Leu Leu Arg His Ala Phe Arg Glu Met Phe Ser Val Gly
            180                 185                 190
Gly Leu Phe Trp Met Phe Arg Ile Arg Ile Ile Leu Cys Leu Met Gly
        195                 200                 205
Ala Phe Phe Tyr Leu Ile Ser Pro Leu Asp Phe Val Pro Glu Ala Leu
    210                 215                 220
Phe Gly Ile Leu Gly Phe Leu Asp Asp Phe Phe Val Ile Phe Leu Leu
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<222> (335)..(2185)

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<213> Homo sapiens

<400> 17782

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         35                  40                  45
Leu Asp Arg Ile Ala Asn Val Ser Ile Leu Lys Gln His Glu Val Asp
     50                  55                  60
Lys Leu Tyr Lys Val Glu Asn Lys Pro Ala Leu Ser Ser Asn Glu Gln
 65                  70                  75                  80
Leu Cys Phe Leu Val Arg Pro Arg Ile Lys Asn Met Arg Tyr Ile Ala
                 85                  90                  95
Ser Leu Val Asn Ala Asp Lys Leu Ala Gly Arg Thr Arg Lys Tyr Lys
            100                 105                 110
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        115                 120                 125
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    130                 135                 140
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            180                 185                 190
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        195                 200                 205
Asn Leu Glu Glu Glu Glu Asp Gly Glu Thr Lys Gly Arg Arg Pro Glu
    210                 215                 220
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Phe Ser Gly Ala Tyr Val Pro Leu Ser Cys Arg Ile Ile Glu Gln Val
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Thr Phe Ser Glu Ile Ser Ala Leu Arg Phe Leu Gly Arg Glu Lys Gly
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<212> DNA
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<212> PRT
<213> Homo sapiens

<400> 17784

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Gly	Gly	Phe	His	Pro	Pro	Tyr	Trp	Gln	Pro	Gly	Pro	Pro	Gly	Pro	Pro
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (247)..(561)

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<212> PRT
<213> Homo sapiens

<400> 17786
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35 40 45
Cys Lys Pro Gly Thr Gly Gly Glu Leu Leu Gln Leu Trp Phe Leu Leu
50 55 60
Ala Glu Glu Thr Cys Ser Arg Gly Gln Leu Asp Asn Leu Ala Leu Phe
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Cys Arg Gly Ala Ser Leu Ile His Ser
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<210> 17787
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<212> DNA
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<220>
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<222> (155)..(1513)

<400> 17787
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US 2003/0165900 A1

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<210> 17788
<211> 453
<212> PRT
<213> Homo sapiens

<400> 17788
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35 40 45
Glu Tyr Gln Asp Ser Thr Phe Glu Glu Lys Tyr Ala Cys Glu Gly Met
50 55 60
Lys Glu Asn Ser Pro Arg Glu Ile Ala Glu Ser Cys Leu Phe Gln Glu
65 70 75 80
Gly Gly Phe Gly Arg Ile Thr Phe Ile His Lys Glu Ala Pro Pro Glu
85 90 95
Ile Ile Ser Gln Gly Tyr Asn Phe Glu Lys Ser Leu Leu Leu Thr Ser
100 105 110
Ser Leu Val Thr Arg Leu Arg Val Ser Thr Glu Glu Ser Leu His Gln
115 120 125
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130 135 140
Cys Pro Thr Leu Cys Thr Gln Lys Lys Ser Trp Lys Cys Asn Glu Cys
145 150 155 160
Gly Lys Thr Phe Thr Gln Ser Ser Ser Leu Thr Gln His Gln Arg Thr
165 170 175
His Thr Gly Glu Arg Pro Tyr Thr Cys Glu Glu Cys Gly Lys Ala Phe
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225 230 235 240
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260 265 270
Gly Arg His Ser Ile Arg Ile His Thr Leu Phe Ile Ile Arg Glu Phe
275 280 285
Thr Leu Val Arg Ser Leu Thr Tyr Ala Val Asn Val Ala Leu Leu Phe
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305 310 315 320
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325 330 335
Thr Ser Leu Ser Ile Arg Glu Phe Ile Val Glu Arg Asn Pro Ile Asn
340 345 350
Val Lys Asn Val Ala Lys Pro Phe Val Arg Ala His Leu Leu Ser Asn
355 360 365
Thr Ser Glu Phe Ile Leu Glu Lys Asn His Ile Ser Val Lys Asn Val
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Ala Lys Arg Leu Leu Arg Ala Pro His Ser Leu Asn Ile Arg Glu Tyr
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Phe Arg Ala Phe Ala Leu Phe Gly Thr Arg Glu Val Thr Leu Glu Lys
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<211> 1088
<212> DNA
<213> Homo sapiens

<400> 17789
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<211> 1563
<212> DNA
<213> Homo sapiens

<220>
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<222> (187)..(1473)

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<210> 17791
<211> 429
<212> PRT
<213> Homo sapiens

<400> 17791

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		35					40				45				
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	50					55				60					
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Ile Asp Lys Ala Thr Gly Lys Ile Ser Lys Leu Gly Arg Ser Phe Thr
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Arg Ala Arg Asp Tyr Asp Ala Met Gly Ser Gln Thr Lys Phe Val Gln
            180                 185                 190
Cys Pro Asp Gly Glu Leu Gln Lys Arg Lys Glu Val Val His Thr Val
        195                 200                 205
Ser Leu His Glu Ile Asp Val Ile Asn Ser Arg Thr Gln Gly Phe Leu
    210                 215                 220
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225                 230                 235                 240
Gln Ile Asn Ala Lys Val Ala Glu Trp Arg Glu Glu Gly Lys Ala Glu
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Ile Ile Pro Gly Val Leu Phe Ile Asp Glu Val His Met Leu Asp Ile
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Glu Ser Phe Ser Phe Leu Asn Arg Ala Leu Glu Ser Asp Met Ala Pro
        275                 280                 285
Val Leu Ile Met Ala Thr Asn Arg Gly Ile Thr Arg Ile Arg Gly Thr
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Ser Tyr Gln Ser Pro His Gly Ile Pro Ile Asp Leu Leu Asp Arg Leu
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Ile Gln Leu Ile Thr Ala Ala Ser Leu Val Cys Arg Lys Arg Lys Gly
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<212> DNA
<213> Homo sapiens

<220>

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<221> CDS
<222> (128)..(700)

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<210> 17793
<211> 191
<212> PRT
<213> Homo sapiens

<400> 17793
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Trp Gly Gly Ala Phe Cys Glu Asn Val Ser Ala Pro Gln His Ala Ser
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Asp Leu Val Asn Pro Leu Gly Lys Asp Arg Gly Ser Gly Trp Arg Thr
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Asp Cys Gly Glu Leu Lys Lys Leu Thr Cys Ala Ala Thr Lys Arg Ala
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Ala Ala Leu Ser His Ser Pro Arg Ala Thr Glu Ile Glu Lys Ala Pro
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Glu Pro Ala Ala Gly Gly Leu Gly Ser Thr Leu Pro Ser Arg Glu Lys
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Arg Thr Lys Arg Gly Asp Gly Leu Gly Met Ala Pro Pro Phe Thr Ala
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Leu Gln Ser Leu Glu Thr Lys Pro Pro Leu Gln Ala Ser Thr Ser Arg
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Arg Asp Lys Gly Ser Glu Glu Ile Gln Arg Pro Thr Gly Arg Trp Trp
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<210> 17794
<211> 1945
<212> DNA
<213> Homo sapiens

<400> 17794

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (439)..(894)

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<210> 17796
<211> 152
<212> PRT
<213> Homo sapiens

<400> 17796
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Thr Leu Ala Ala Leu Val Ile Arg Ile Ser Cys His Thr Asp Cys Arg
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Arg Arg Pro Gly Lys Lys Phe Leu Gln Asp Arg Glu Ser Ser Ser Asp
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Val Arg Arg His Arg Arg Phe Glu Arg Thr Leu Asn Lys Asn Val Phe
100 105 110
Thr Ser Ala Glu Glu Leu Glu Arg Ala Gln Arg Leu Glu Glu Arg Glu
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Thr Arg Ser Leu Asn Arg Tyr Tyr
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<210> 17797
<211> 2333
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1397)..(1948)

<400> 17797

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<210> 17798
<211> 184
<212> PRT
<213> Homo sapiens

<400> 17798
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0602020-0450-0

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Gly Ile Ser Phe Pro Val Asp Pro Ser Thr Cys Ala Ser Thr Gly Ser
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Val Gln Trp Ser Arg His Phe Ser Gly Arg Thr Ile Thr Leu Gln Pro
    50                  55                  60
Gly Ser Pro Cys Asn Asp Phe Arg Gly Tyr Cys Asp Val Phe Met Arg
65                  70                  75                  80
Cys Arg Leu Val Asp Ala Asp Gly Pro Leu Ala Arg Leu Lys Lys Ala
                85                  90                  95
Ile Phe Ser Pro Glu Leu Tyr Glu Asn Ile Ala Glu Trp Ile Val Ala
            100                 105                 110
His Trp Trp Ala Val Leu Leu Met Gly Ile Ala Leu Ile Met Leu Met
        115                 120                 125
Ala Gly Phe Ile Lys Ile Cys Ser Val His Thr Pro Ser Ser Asn Pro
    130                 135                 140
Lys Leu Pro Pro Pro Lys Pro Leu Pro Gly Thr Leu Lys Arg Arg Arg
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<212> DNA
<213> Homo sapiens

<220>
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<211> 375
<212> PRT
<213> Homo sapiens

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0050050-020800

<400> 17800

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        35                  40                  45
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    50                  55                  60
Asn Lys Leu Ser Val Gln Ser Ser Gly Asn Arg Arg Ser Gln Ser Ser
65                  70                  75                  80
Ser Leu Leu Asp Met Gly Asn Met Ser Ala Ser Asp Leu Asp Val Ala
                85                  90                  95
Asp Arg Thr Lys Phe Asp Lys Ile Phe Glu Gln Val Leu Ser Glu Leu
            100                 105                 110
Glu Pro Leu Cys Leu Ala Glu Gln Asp Phe Ile Ser Lys Phe Phe Lys
        115                 120                 125
Leu Gln Gln His Gln Ser Met Pro Gly Thr Met Ala Glu Ala Glu Asp
    130                 135                 140
Leu Asp Gly Gly Thr Leu Ser Arg Gln His Asn Cys Gly Thr Pro Leu
145                 150                 155                 160
Pro Val Ser Ser Glu Lys Asp Met Ile Arg Gln Met Met Ile Lys Ile
                165                 170                 175
Phe Arg Cys Ile Glu Pro Glu Leu Asn Asn Leu Ile Ala Leu Gly Asp
            180                 185                 190
Lys Ile Asp Ser Phe Asn Ser Leu Tyr Met Leu Val Lys Met Ser His
        195                 200                 205
His Val Trp Thr Ala Gln Asn Val Asp Pro Ala Ser Phe Leu Ser Thr
    210                 215                 220
Thr Leu Gly Asn Val Leu Val Thr Val Lys Arg Asn Phe Asp Lys Cys
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Ser Lys Val Gly Ile Leu Pro Phe Val Ala Glu Phe Glu Glu Phe Ala
            260                 265                 270
Gly Leu Ala Glu Ser Ile Phe Lys Asn Ala Glu Arg Arg Gly Asp Leu
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Asp Lys Ala Tyr Thr Lys Leu Ile Arg Gly Val Phe Val Asn Val Glu
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Lys Val Ala Asn Glu Ser Gln Lys Thr Pro Arg Asp Val Val Met Met
305                 310                 315                 320
Glu Asn Phe His His Ile Phe Ala Thr Leu Ser Arg Leu Lys Ile Ser
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Cys Leu Glu Ala Glu Lys Lys Glu Ala Lys Gln Lys Tyr Thr Asp His
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65                  70                  75                  80
Asp Thr Asn Asp Val Ser Phe Met Glu Gly Gly Ala Leu Arg Val Ser
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Ser Gly Pro Gln Arg Cys Gly Ile Arg Thr Ser Asp Ile Ile Ile Leu
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35 40 45
Tyr Val Ser Leu Pro Pro Pro Cys Thr His Ile Leu Glu Cys Gln Leu
50 55 60
Pro Gly Cys Arg Asp Arg Ala Phe Val His Arg Asn Asn Pro Arg Ala
65 70 75 80
Trp Arg Gly Pro Gly Thr Lys Leu Pro Asn His Leu Tyr Pro His Gly
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Phe Ala Pro Arg Ser Ser Glu Ile Ala Ser Leu Glu Lys Leu Arg Gln
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35 40 45
Arg Pro Arg Gly Arg Arg Ser Arg Pro Ser Ser Arg Gly Ala Ser Pro
50 55 60
Asn Arg Ser Thr Ser Val Ser Ser Gln Ala Ala Gln Ala Ala Ser Pro
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85 90 95
Asn Tyr Gly Lys Pro Trp Leu Thr Asn Ser Lys Met Ser Thr Pro Cys
100 105 110
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115 120 125
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Gly Ser Asp Ala Ser Asp Phe Asp Ile Ser Glu Ile Gln Ser Val Cys
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Glu Lys Ala Leu Phe Arg Arg His Val Lys Lys Ala Thr His Gly Lys
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Lys Gly Arg Ala Lys Gln Asn Leu Glu Arg Val Cys Glu Lys Cys Gly
65 70 75 80
Arg Lys Phe Thr Gln Leu Arg Glu Tyr Arg Arg His Met Asn Asn His
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Glu Gly Val Lys Pro Phe Glu Cys Leu Thr Cys Gly Val Ala Trp Ala
100 105 110
Asp Ala Arg Ser Leu Lys Arg His Val Arg Thr His Thr Gly Glu Arg
115 120 125
Pro Tyr Val Cys Pro Val Cys Ser Glu Ala Tyr Ile Asp Ala Arg Thr
130 135 140
Leu Arg Lys His Met Thr Lys Phe His Arg Asp Tyr Val Pro Cys Lys
145 150 155 160
Ile Met Leu Glu Lys Asp Thr Leu Gln Phe His Asn Gln Gly Thr Gln
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Val Ala His Ala Val Ser Ile Leu Thr Ala Gly Met Gln Glu Gln Glu
180 185 190
Ser Ser Gly Pro Gln Glu Leu Glu Thr Val Val Val Thr Gly Glu Thr
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Met Glu Ala Leu Glu Ala Val Ala Ala Thr Glu Glu Tyr Pro Ser Val
210 215 220
Ser Thr Leu Ser Asp Gln Ser Ile Met Gln Val Val Asn Tyr Val Leu
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Ala Gln Gln Gln Gly Gln Lys Leu Ser Glu Val Ala Glu Ala Ile Gln
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Gln Cys Ser Glu Gly Phe Leu Ile Asn Glu Asp Leu Met Thr Cys Ser
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Arg Val Asp Tyr Cys Leu Leu Ser Asp His Gly Cys Glu Tyr Ser Cys
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Val Asn Met Asp Arg Ser Phe Ala Cys Gln Cys Pro Glu Gly His Val
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Leu Arg Ser Asp Gly Lys Thr Cys Ala Lys Leu Asp Ser Cys Ala Leu
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Gly Asp His Gly Cys Glu His Ser Cys Val Ser Ser Glu Asp Ser Phe
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Val Cys Gln Cys Phe Glu Gly Tyr Ile Leu Arg Glu Asp Gly Lys Thr
    130                 135                 140
Cys Arg Arg Lys Asp Val Cys Gln Ala Ile Asp His Gly Cys Glu His
145                 150                 155                 160
Ile Cys Val Asn Ser Asp Asp Ser Tyr Thr Cys Glu Cys Leu Glu Gly
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Phe Arg Leu Ala Glu Asp Gly Lys Arg Cys Arg Arg Lys Asp Val Cys
            180                 185                 190
Lys Ser Thr His His Gly Cys Glu His Ile Cys Val Asn Asn Gly Asn
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Ser Tyr Ile Cys Lys Cys Ser Glu Gly Phe Val Leu Ala Glu Asp Gly
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Arg Arg Cys Lys Lys Cys Thr Glu Gly Pro Ile Asp Leu Val Phe Val
225                 230                 235                 240
Ile Asp Gly Ser Lys Ser Leu Gly Glu Glu Asn Phe Glu Val Val Lys
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Gln Phe Val Thr Gly Ile Ile Asp Ser Leu Thr Ile Ser Pro Lys Ala
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Ala Arg Val Gly Leu Leu Gln Tyr Ser Thr Gln Val His Thr Glu Phe
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Thr Leu Arg Asn Phe Asn Ser Ala Lys Asp Met Lys Lys Ala Val Ala
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Ser Thr Arg Val Pro Arg Ala Ala Ile Val Phe Thr Asp Gly Arg Ala
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Gln Asp Asp Val Ser Glu Trp Ala Ser Lys Ala Lys Ala Asn Gly Ile
        355                 360                 365
Thr Met Tyr Ala Val Gly Val Gly Lys Ala Ile Glu Glu Glu Leu Gln
    370                 375                 380
Glu Ile Ala Ser Glu Pro Thr Asn Lys His Leu Phe Tyr Ala Glu Asp
385                 390                 395                 400
Phe Ser Thr Met Asp Glu Ile Ser Glu Lys Leu Lys Lys Gly Ile Cys
                405                 410                 415
Glu Ala Leu Glu Asp Ser Asp Gly Arg Gln Asp Ser Pro Ala Gly Glu
            420                 425                 430
Leu Pro Lys Thr Val Gln Gln Pro Thr Gly Ser Glu Pro Val Thr Ile
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Asn Ile Gln Asp Leu Leu Ser Cys Ser Asn Phe Ala Val Gln His Arg
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Tyr Leu Phe Glu Glu Asp Asn Leu Leu Arg Ser Thr Gln Lys Leu Ser
465                 470                 475                 480
His Ser Thr Lys Pro Ser Gly Ser Pro Leu Glu Glu Lys His Asp Gln
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Cys Lys Cys Glu Asn Leu Ile Met Phe Gln Asn Leu Ala Asn Glu Glu
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<213> Homo sapiens

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<222> (12)..(1085)

<400> 17815
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gtagaggaaa tggtgaatat gcatggtatt atgaaggaag aaatgggtgg tggcagtacg 360
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<212> PRT
<213> Homo sapiens

<400> 17816

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Val	Pro	Glu	Cys	Ala	Ile	Cys	Leu	Gln	Thr	Cys	Val	His	Pro	Val	Ser
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Trp	Leu	Gly	Arg	Arg	Cys	Ala	Leu	Cys	Arg	Gln	Glu	Ile	Pro	Glu	Asp
65					70					75					80
Phe	Leu	Asp	Lys	Pro	Thr	Leu	Leu	Ser	Pro	Glu	Glu	Leu	Lys	Ala	Ala
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Ser	Arg	Gly	Asn	Gly	Glu	Tyr	Ala	Trp	Tyr	Tyr	Glu	Gly	Arg	Asn	Gly
			100					105					110		
Trp	Trp	Gln	Tyr	Asp	Glu	Arg	Thr	Ser	Arg	Glu	Leu	Glu	Asp	Ala	Phe
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Ser Lys Gly Lys Lys Asn Thr Glu Met Leu Ile Ala Gly Phe Leu Tyr
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Val Ala Asp Leu Glu Asn Met Val Gln Tyr Arg Arg Asn Glu His Gly
145 150 155 160
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180 185 190
Arg Glu Ser Ser Ala Asp Gly Ala Asp Ser Val Ser Ala Gln Ser Gly
195 200 205
Ala Ser Val Gln Pro Leu Val Ser Ser Val Arg Pro Leu Thr Ser Val
210 215 220
Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser Pro Asp Ala Ser Thr
225 230 235 240
Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu Ser Gly Asp Asn Thr
245 250 255
Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu Asp His Glu Ser Pro
260 265 270
Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser Ile Glu Glu Thr Glu
275 280 285
Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser Ala Val Val Ala Gln
290 295 300
His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser Asn Ala Asn Gln Thr
305 310 315 320
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Cys Thr Val Thr Glu Val
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<210> 17817
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<212> DNA
<213> Homo sapiens

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aaaatccaaa acagcaaact actagaactg agaaaattca gcaaggttgt ctaatataag 540
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0090294 - 0090294

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS

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<222> (223)..(1644)

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<210> 17819
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<212> PRT
<213> Homo sapiens

<400> 17819
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Leu Lys Glu Leu Lys Ala Ser His Pro Ile Pro Glu Asp Lys Gly Lys

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Glu Lys Tyr Lys Ala Ser Gln Lys Glu Met Gly Gln Leu Gln Met Glu
 65                  70                  75                  80
Gln Cys Glu Leu Leu Glu Asp Gln Arg Arg Met Gln Glu Glu Gln Gly
                 85                  90                  95
Gln Leu Gln Glu Glu Leu His Arg Leu Thr Leu Pro Leu Pro Lys Ser
            100                 105                 110
Gly Leu Leu Leu Lys Ser Gln Glu Leu Leu Thr Lys Leu Glu Asp Leu
        115                 120                 125
Cys Glu Leu Gln Leu Leu Tyr Gln Gly Met Gln Glu Glu Gln Lys Lys
    130                 135                 140
Leu Ile Gln Asn Gln Asp Cys Val Leu Lys Glu Gln Leu Glu Ile His
145                 150                 155                 160
Glu Glu Leu Arg Arg Phe Lys Glu Ser His Phe Gln Glu Val Leu Glu
                165                 170                 175
Asn Pro Asp Asp Ser Lys Leu Ala Lys Ser Ser Lys Cys Asn Arg Asn
            180                 185                 190
Lys Gln Ser Lys Leu Leu Met Glu Gln Met Gln Ala Leu Gln Val Met
        195                 200                 205
Tyr Asp Ala Gly Gln Ala Lys Gln Glu Leu Leu Gln Gln Glu Gln Gly
    210                 215                 220
Arg Leu Leu Glu Glu Arg Lys Arg Leu Gln Ala Asp Leu Gln Leu Cys
225                 230                 235                 240
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                245                 250                 255
Ser Leu Glu Ser Tyr Gly Lys Ser Tyr Gly Ser Met Val Pro Ser Asn
            260                 265                 270
Glu Asn Cys Arg Lys Thr Tyr Asp Thr Thr Val Asp Asp Asn Glu Ser
        275                 280                 285
Tyr Tyr Lys Ser Tyr Thr Ser Thr Gln Thr Ser Ser Lys Ser Phe Leu
    290                 295                 300
Lys Ser Tyr Asp Ser Ser Thr Ser Ala Ser Glu Ala Tyr Gly Lys Ser
305                 310                 315                 320
Tyr Cys Thr Thr Ser Asn Ser Ser Ile Thr Tyr Lys Lys Ser Tyr Gly
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Ser Thr Ser Ser Ser Asp Thr Cys Gln Lys Ser Phe Val Ser Ser Cys
            340                 345                 350
Thr Asp Glu Glu Pro Ala Glu Pro Glu Asp Met Glu Arg Phe Glu Glu
        355                 360                 365
Met Val Val Lys Val Leu Ile Lys Leu Gln Ala Val Gln Ala Met Tyr
    370                 375                 380
Gln Ile Ser Gln Glu Glu His Ser Gln Leu Gln Glu Gln Met Glu Lys
385                 390                 395                 400
Leu Leu Ala Lys Gln Lys Asp Leu Lys Glu Glu Leu Asp Ala Cys Glu
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Arg Glu Phe Lys Glu Cys Met Glu Cys Leu Glu Lys Pro Met Ala Pro
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
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<210> 17821
<211> 107
<212> PRT
<213> Homo sapiens

<400> 17821
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Cys Leu Ala Leu Tyr Met Leu Glu Thr Glu Phe Leu Ile Trp Asp Pro
35 40 45
Ser Leu Pro Gly Pro Cys Ser Gly Phe Pro Ile Leu Val Ser Cys Thr
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Thr Gln His Ser Val Val Thr Arg Ile Pro Arg Thr Pro Leu His Ser
65 70 75 80
His Phe Ser Ala His Leu Leu Pro Cys Pro Pro Ile Tyr Asn Ser Phe
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<213> Homo sapiens

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<222> (613)..(2115)

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<212> PRT
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<400> 17823
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Met Asp Phe Gly Thr Met Lys Asp Lys Ile Val Ala Asn Glu Tyr Lys
65                  70                  75                  80
Ser Val Thr Glu Phe Lys Ala Asp Phe Lys Leu Met Cys Asp Asn Ala
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Met Thr Tyr Asn Arg Pro Asp Thr Val Tyr Tyr Lys Leu Ala Lys Lys
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Ile Leu His Ala Gly Phe Lys Met Met Ser Lys Glu Arg Leu Leu Ala
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Leu Lys Arg Ser Met Ser Phe Met Gln Asp Met Asp Phe Ser Gln Gln
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Glu Val Val Pro Val Gln Val Glu Thr Ala Lys Lys Ser Lys Lys Pro
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Ser Arg Glu Val Ile Ser Cys Met Phe Glu Pro Glu Gly Asn Ala Cys
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Ser Leu Thr Asp Ser Thr Ala Glu Glu His Val Leu Ala Leu Val Glu
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His Ala Ala Asp Glu Ala Arg Asp Arg Ile Asn Arg Phe Leu Pro Gly
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Gly Lys Met Gly Tyr Leu Lys Arg Asn Gly Asp Gly Ser Leu Leu Tyr
225                 230                 235                 240
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Pro Val Asp Leu Ser Ser Leu Ser Ser Lys Leu Leu Pro Gly Phe Thr
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Thr Leu Gly Phe Lys Asp Glu Arg Arg Asn Lys Val Thr Phe Leu Ser
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Gly Ser Tyr Ser Lys Lys Val Val Asp Asp Leu Leu Asp Gln Ile Thr
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Gly Gly Asp His Ser Arg Thr Leu Phe Gln Leu Lys Gln Arg Arg Asn
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Lys Leu Leu Gln Asp Leu His Glu Ala Gln Ala Glu Arg Gly Gly Ser
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Arg Pro Ser Ser Asn Leu Ser Ser Leu Ser Asn Ala Ser Glu Arg Asp
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Gln His His Leu Gly Ser Pro Ser Arg Leu Ser Val Gly Glu Gln Pro
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<212> DNA
<213> Homo sapiens

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<222> (267)..(1730)

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<212> PRT
<213> Homo sapiens

<400> 17825

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Thr	Gln	Lys	Glu	Lys	Ala	Asn	Ile	Gly	Thr	Glu	His	Tyr	Lys	Cys	Asn
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Glu	Arg	Gly	Lys	Ala	Phe	His	Gln	Gly	Leu	His	Phe	Thr	Ile	His	Gln
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Ile	Ile	His	Thr	Lys	Glu	Thr	Gln	Phe	Lys	Cys	Asp	Ile	Cys	Gly	Lys
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Tyr	Lys	Cys	Asn	Glu	Cys	Gly	Lys	Val	Phe	Asn	Gln	Ile	Ser	His	Leu
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Ala	Gln	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Asn
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385 390 395 400
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Ala His His Arg Lys Ile His Thr Gly Glu Lys Pro Phe Lys Cys Asn
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<400> 17827
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Phe Lys Ile Thr Ala Pro Leu Ile Asn Lys Arg Lys Glu Tyr Ser Glu
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    130                 135                 140
Pro His Leu Val Lys Ala Ser Cys Thr Asp Gly Arg Leu Phe Asn His
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Leu Glu Thr Ile Trp Arg Phe Ser Pro Gly Leu Pro Gly Tyr Pro Arg
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Thr Cys Thr Leu Asp Phe Ser Ile Ser Phe Glu Phe Arg Ser Leu Leu
            180                 185                 190
His Ser Gln Leu Ala Thr Leu Phe Phe Asp Glu Val Val Lys Gln Met
        195                 200                 205
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<220>
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<222> (653)..(1054)

<400> 17828

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<212> PRT
<213> Homo sapiens

<400> 17829

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<212> PRT
<213> Homo sapiens

<400> 17835

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Lys Ser Lys Gly Lys Ala Glu Val Ala Val Thr Leu Tyr Gln His Val
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Cys Val His Leu Cys Thr Phe Ile Thr Ser Phe His Pro Ser Leu Phe
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<400> 17836

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<212> PRT
<213> Homo sapiens

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        50                  55                  60
Trp Asp Tyr Gly Tyr Gln Ile Ala Gly Met Ala Asn Arg Thr Thr Leu
65                  70                  75                  80
Val Asp Asn Asn Thr Trp Asn Asn Ser His Ile Ala Leu Val Gly Lys
                85                  90                  95
Ala Met Ser Ser Asn Glu Thr Ala Ala Tyr Lys Ile Met Arg Thr Leu
            100                 105                 110
Asp Val Asp Tyr Val Leu Val Ile Phe Gly Gly Val Ile Gly Tyr Ser
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Gly Asp Asp Ile Asn Lys Phe Leu Trp Met Val Arg Ile Ala Glu Gly
    130                 135                 140
Glu His Pro Lys Asp Ile Arg Glu Ser Asp Tyr Phe Thr Pro Gln Gly
145                 150                 155                 160
Glu Phe Arg Val Asp Lys Ala Gly Ser Pro Thr Leu Leu Asn Cys Leu
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Met Tyr Lys Met Ser Tyr Tyr Arg Phe Gly Glu Met Gln Leu Asp Phe
            180                 185                 190
Arg Thr Pro Pro Gly Phe Asp Arg Thr Arg Asn Ala Glu Ile Gly Asn
        195                 200                 205
Lys Asp Ile Lys Phe Lys His Leu Glu Glu Ala Phe Thr Ser Glu His
    210                 215                 220
Trp Leu Val Arg Ile Tyr Lys Val Lys Ala Pro Asp Asn Arg Glu Thr
225                 230                 235                 240
Leu Asp His Lys Pro Arg Val Thr Asn Ile Phe Pro Lys Gln Lys Tyr
                245                 250                 255
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<211> 183
<212> PRT
<213> Homo sapiens

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Lys Leu Glu Leu Glu Lys Arg Arg Leu Asp Ile Glu Ala Glu Arg Leu
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Gln Val Glu Lys Glu Arg Leu Gln Ile Glu Lys Glu Arg Leu Arg His
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Leu Asp Met Glu His Glu Arg Leu Gln Leu Glu Lys Glu Arg Leu Gln
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Ile Glu Arg Glu Lys Leu Arg Leu Gln Ile Val Asn Ser Glu Lys Pro
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Ser Leu Glu Asn Glu Leu Gly Gln Gly Glu Lys Ser Met Leu Gln Pro
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tatagggatt tgtaaaatta aaaatgcttt gcatgtttta ctttatacct taacagggtt 1920
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<211> 406
<212> PRT
<213> Homo sapiens

<400> 17842

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			20					25					30		
Trp	Val	Glu	Glu	Asn	Phe	Pro	Glu	Asn	Lys	Glu	Tyr	Leu	Ile	Thr	Leu
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Leu	Glu	His	Leu	Met	Lys	Glu	Phe	Leu	Asp	Lys	Lys	Lys	Tyr	His	Asn
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Asp	Pro	Arg	Phe	Ile	Ser	Tyr	Cys	Leu	Lys	Phe	Ala	Glu	Tyr	Asn	Ser
65					70					75					80
Asp	Leu	His	Gln	Phe	Phe	Glu	Phe	Leu	Tyr	Asn	His	Gly	Ile	Gly	Thr
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Leu	Ser	Ser	Pro	Leu	Tyr	Ile	Ala	Trp	Ala	Gly	His	Leu	Glu	Ala	Gln
			100					105					110		
Gly	Glu	Leu	Gln	His	Ala	Ser	Ala	Val	Leu	Gln	Arg	Gly	Ile	Gln	Asn
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Gln	Ala	Glu	Pro	Arg	Glu	Phe	Leu	Gln	Gln	Gln	Tyr	Arg	Leu	Phe	Gln
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Thr	Arg	Leu	Thr	Glu	Thr	His	Leu	Pro	Ala	Gln	Ala	Arg	Thr	Ser	Glu
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Pro	Leu	His	Asn	Val	Gln	Val	Leu	Asn	Gln	Met	Ile	Thr	Ser	Lys	Ser
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Leu Ser Gly Val Ile Ser Ser Ala Cys Asp Lys Glu Ser Asn Met Glu
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210 215 220
Leu Ala Ser Lys Val Asp Val Glu Gln Val Val Met Tyr Cys Lys Glu
225 230 235 240
Lys Leu Ile Arg Gly Glu Ser Glu Phe Ser Phe Glu Glu Leu Arg Ala
245 250 255
Gln Lys Tyr Asn Gln Arg Arg Lys His Glu Gln Trp Val Asn Glu Asp
260 265 270
Arg His Tyr Met Lys Arg Lys Glu Ala Asn Ala Phe Glu Glu Gln Leu
275 280 285
Leu Lys Gln Lys Met Asp Glu Leu His Lys Lys Leu His Gln Val Val
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Glu Thr Ser His Glu Asp Leu Pro Ala Ser Gln Glu Arg Ser Glu Val
305 310 315 320
Asn Pro Ala Arg Met Gly Pro Ser Val Gly Ser Gln Gln Glu Leu Arg
325 330 335
Ala Pro Cys Leu Pro Val Thr Tyr Gln Gln Thr Pro Val Asn Met Glu
340 345 350
Lys Asn Pro Arg Glu Ala Pro Pro Val Val Pro Pro Leu Ala Asn Ala
355 360 365
Ile Ser Ala Ala Leu Val Ser Pro Ala Thr Ser Gln Ser Ile Ala Pro
370 375 380
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Ala Ser Lys Asp Ala Gly
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<212> DNA
<213> Homo sapiens

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<222> (1758)..(2102)

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<212> PRT
<213> Homo sapiens

<400> 17844

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			20					25				30			
Val	Ala	His	Thr	Gln	His	Phe	Gly	Arg	Pro	Arg	Leu	Val	Asp	Cys	Phe
		35					40					45			
Glu	Leu	Arg	Asn	Ser	Arg	Pro	Ala	Trp	Ala	Thr	Trp	Gln	Asn	Pro	Leu
	50					55					60				
Pro	Thr	Lys	Ile	Gln	Lys	Leu	Ala	Gly	Cys	Gly	Gly	Met	His	Leu	Trp
65					70					75					80

Ser Gln Leu Leu Gly Arg Leu Arg Leu Glu Asp Arg Leu Asn Pro Gly
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Val Thr Glu
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<212> DNA
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<211> 675
<212> PRT
<213> Homo sapiens

<400> 17846
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35 40 45
Glu Asp Glu Glu Glu Leu Asn His Arg Leu Val Val Leu Gly Lys Leu
50 55 60
Asn Asn Leu Val Lys Glu Trp Ile Ser Asp Val Ser Glu Ser Lys Asn
65 70 75 80
Leu Pro Pro Ser Val Val Ala Thr Val Gly Gly Lys Ile Phe Thr Phe
85 90 95
Gly Ser Tyr Arg Leu Gly Val His Thr Lys Gly Ala Asp Ile Asp Ala
100 105 110
Leu Cys Val Ala Pro Arg His Val Glu Arg Ser Asp Phe Phe Gln Ser
115 120 125
Phe Phe Glu Lys Leu Lys His Gln Asp Gly Ile Arg Asn Leu Arg Ala
130 135 140
Val Glu Asp Ala Phe Val Pro Val Ile Lys Phe Glu Phe Asp Gly Ile
145 150 155 160
Glu Ile Asp Leu Val Phe Ala Arg Leu Ala Ile Gln Thr Ile Ser Asp
165 170 175
Asn Leu Asp Leu Arg Asp Asp Ser Arg Leu Arg Ser Leu Asp Ile Arg
180 185 190
Cys Ile Arg Ser Leu Asn Gly Cys Arg Val Thr Asp Glu Ile Leu His
195 200 205
Leu Val Pro Asn Lys Glu Thr Phe Arg Leu Thr Leu Arg Ala Val Lys
210 215 220
Leu Trp Ala Lys Arg Arg Gly Ile Tyr Ser Asn Met Leu Gly Phe Leu
225 230 235 240
Gly Gly Val Ser Trp Ala Met Leu Val Ala Arg Thr Cys Gln Leu Tyr
245 250 255
Pro Asn Ala Ala Ala Ser Thr Leu Val His Lys Phe Phe Leu Val Phe
260 265 270
Ser Lys Trp Glu Trp Pro Asn Pro Val Leu Leu Lys Gln Pro Glu Glu
275 280 285

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Arg Tyr His Leu Met Pro Ile Ile Thr Pro Ala Tyr Pro Gln Gln Asn
305                 310                 315                 320
Ser Thr Tyr Asn Val Ser Thr Ser Thr Arg Thr Val Met Val Glu Glu
                325                 330                 335
Phe Lys Gln Gly Leu Ala Val Thr Asp Glu Ile Leu Gln Gly Lys Ser
            340                 345                 350
Asp Trp Ser Lys Leu Leu Glu Pro Pro Asn Phe Phe Gln Lys Tyr Arg
        355                 360                 365
His Tyr Ile Val Leu Thr Ala Ser Ala Ser Thr Glu Glu Asn His Leu
    370                 375                 380
Glu Trp Val Gly Leu Val Glu Ser Lys Ile Arg Val Leu Val Gly Asn
385                 390                 395                 400
Leu Glu Arg Asn Glu Phe Ile Thr Leu Ala His Val Asn Pro Gln Ser
                405                 410                 415
Phe Pro Gly Asn Lys Glu His His Lys Asp Asn Asn Tyr Val Ser Met
            420                 425                 430
Trp Phe Leu Gly Ile Ile Phe Arg Arg Val Glu Asn Ala Glu Ser Val
        435                 440                 445
Asn Ile Asp Leu Thr Tyr Asp Ile Gln Ser Phe Thr Asp Thr Val Tyr
    450                 455                 460
Arg Gln Ala Asn Asn Ile Asn Met Leu Lys Glu Gly Met Lys Ile Glu
465                 470                 475                 480
Ala Thr His Val Lys Lys Lys Gln Leu His His Tyr Leu Pro Ala Glu
                485                 490                 495
Ile Leu Gln Lys Lys Lys Lys Gln Ser Leu Ser Asp Val Asn Arg Ser
            500                 505                 510
Ser Gly Gly Leu Gln Ser Lys Arg Leu Ser Leu Asp Ser Ser Cys Leu
        515                 520                 525
Asp Ser Ser Arg Asp Thr Asp Asn Gly Thr Pro Phe Asn Ser Pro Ala
    530                 535                 540
Ser Lys Ser Asp Ser Pro Ser Val Gly Glu Thr Glu Arg Asn Ser Ala
545                 550                 555                 560
Glu Pro Ala Ala Val Ile Val Glu Lys Pro Leu Ser Val Pro Pro Ala
                565                 570                 575
Gln Gly Leu Ser Ile Pro Val Ile Gly Ala Lys Val Asp Ser Thr Val
            580                 585                 590
Lys Thr Val Ser Pro Pro Thr Val Cys Thr Ile Pro Thr Val Val Gly
        595                 600                 605
Arg Asn Val Ile Pro Arg Ile Thr Thr Pro His Asn Pro Ala Gln Gly
    610                 615                 620
Gln Pro His Leu Asn Gly Met Ser Asn Ile Thr Lys Thr Val Thr Pro
625                 630                 635                 640
Lys Arg Ser His Ser Pro Ser Ile Asp Gly Thr Pro Lys Arg Leu Lys
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Asp Val Glu Lys Phe Ile Arg Leu Glu Ser Thr Phe Lys Asp Pro Arg
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0050450-0050800

Thr Ala Glu
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<211> 1927
<212> DNA
<213> Homo sapiens

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<210> 17848
<211> 1907
<212> DNA

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<213> Homo sapiens

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<211> 2040
<212> DNA
<213> Homo sapiens

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Phe Pro Leu Leu Gln Lys Gly Ser Arg Glu Arg Leu His Leu Glu Asn
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<210> 17864
<211> 104
<212> PRT
<213> Homo sapiens

<400> 17864
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Arg Arg Leu Trp Ala Pro Gln Ser Trp Arg Lys Arg Pro Arg Phe Phe
20 25 30
Cys Thr Arg Ser Val Gly Ile Gly Ala Gly Pro Ser Ala Gly Pro Ser
35 40 45
Ala Val Ser Pro Ala His Ser Tyr Arg Ala Arg Trp Val Ala Leu Ala
50 55 60

0050204950.0078800

Arg Val Pro Gln Gly Glu Ser Met Ala Thr Arg Glu Leu Gln Arg Ser
65 70 75 80
Pro Pro Ala Leu Thr Pro Gly Gln Pro His Pro Gly Leu Phe Glu Asn
85 90 95
Ser Gln Asn Phe Val Pro Phe Pro
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<210> 17865
<211> 1747
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (432)..(782)

<400> 17865
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gaagttc 1747

0960204 - 0960800

<210> 17866
<211> 117
<212> PRT
<213> Homo sapiens

<400> 17866
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20 25 30
Leu Pro Ala Cys Arg Gly Ala Gly Ala Glu Arg Phe Val Pro Leu Leu
35 40 45
Glu Pro Gly Lys Gly Thr Gly Ser Leu Leu Glu Ser Trp Glu Val Gln
50 55 60
Pro Arg Phe Tyr Ile Lys Ile Gln Arg Leu Ala His Val Leu Gly Glu
65 70 75 80
Cys Ser Tyr Ser Ser Gly Met Lys Val Leu Ser Val Pro Tyr Pro Pro
85 90 95
Ser Phe Ser Pro Val Leu His Thr His Ile Pro Gly Ser Leu Ser Leu
100 105 110
Val Arg Arg Leu Asn
115

<210> 17867
<211> 2287
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1621)..(1968)

<400> 17867
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gacagaattg tgtgatacag gtcaaacagg agttgggtta tggggaaaat gccagttgaa 660
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aaaaaag 2287

<210> 17868
<211> 116
<212> PRT
<213> Homo sapiens

<400> 17868
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Thr Phe Ile Tyr Ile Cys Cys Cys Ile Thr Cys Val Val Lys Leu Tyr
20 25 30
Phe Lys Thr Val Lys Lys Leu Thr Cys Ile Tyr Cys Ser Phe Leu Phe
35 40 45
Ile Leu Ser Leu Val Leu Asn Met Tyr Tyr Val Tyr Ile Leu Phe Ala
50 55 60
Asp Ile Ile Val His Ala Leu Glu Asp Cys Ser Ile Leu Leu Ser Ser
65 70 75 80
Glu Gly Asn Asp Ser Tyr Thr Val Cys Thr Val Ile Ile Leu Tyr Gln
85 90 95
His Cys Gly Val Ser Leu Ile Leu Val Val Pro Ala Phe Glu Thr Gly

05525600.0N2800

100 105 110
Cys Arg Gly Tyr
115

<210> 17869
<211> 1949
<212> DNA
<213> Homo sapiens

<400> 17869
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aatatttgaa gagttctcct tgttcttcag ccagttgtct caagtgccaa ttctacctct 180
caagtgtgta tctaattgtt tccttccttg ctactgctac tactttagcc attgccactc 240
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cagtcaactt ccccactact ctctgagtag aaagtctaaa atacagataa tcatgacctc 360
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agcatgggcg acagagaagt ctccgtctc 1949

<210> 17870
<211> 1983

0960204960 - 02-SEP-2009

<212> DNA
<213> Homo sapiens

<400> 17870
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caaactgtaa caacagtgct gggattttgg tatttaaaaa gggcagagta taccagaata 360
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ctggagaact acccagtcgt aagtttatca tcgttgaaat tgcttaagca gagattaggt 660
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<210> 17871
<211> 2075
<212> DNA
<213> Homo sapiens

<400> 17871
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agagcacatg catattaacc aaaataagat catattatat accattgtat aatttttttct 180
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<210> 17872
<211> 2490
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1156)..(2133)

<400> 17872
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<222> (65)..(1981)

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<212> PRT
<213> Homo sapiens

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50 55 60
Gln Val Leu Gln Val Ser Glu Ala Cys Asp Ala Val Phe Val Ala Gly
65 70 75 80
Lys Glu Ser Arg Gly Ala Arg Gly Val Arg Val Asp Phe Trp Trp Arg
85 90 95
Arg Leu Arg Ala Ser Leu Arg Leu Thr Val Trp Ala Pro Leu Leu Pro
100 105 110
Leu Arg Ile Glu Leu Thr Asp Thr Thr Leu Glu Gln Val Arg Gly Trp
115 120 125
Arg Val Pro Gly Pro Ala Glu Gly Pro Ala Glu Pro Ala Ala Glu Ala
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Ser Asp Glu Ala Glu Arg Arg Ala Arg Gly Cys His Leu Gln Tyr Gln
145 150 155 160
Arg Ala Gly Val Arg Phe Leu Ala Pro Phe Ala Ala His Pro Leu Asp
165 170 175
Gly Gly Arg Arg Leu Thr His Leu Leu Gly Pro Asp Trp Leu Leu Asp
180 185 190
Val Ser His Leu Val Ala Pro His Ala Arg Val Leu Asp Ser Arg Val
195 200 205
Ala Ser Leu Glu Gly Gly Arg Val Val Val Gly Arg Glu Pro Gly Val
210 215 220
Thr Ser Ile Glu Val Arg Ser Pro Leu Ser Asp Ser Ile Leu Gly Glu
225 230 235 240
Gln Ala Leu Ala Val Thr Asp Asp Lys Val Ser Val Leu Glu Leu Arg
245 250 255
Val Gln Pro Val Met Gly Ile Ser Leu Thr Leu Ser Arg Gly Thr Ala
260 265 270
His Pro Gly Glu Val Thr Ala Thr Cys Trp Ala Gln Ser Ala Leu Pro
275 280 285
Ala Pro Lys Gln Glu Val Ala Leu Ser Leu Trp Leu Ser Phe Ser Asp
290 295 300
His Thr Val Ala Pro Ala Glu Leu Tyr Asp Arg Arg Asp Leu Gly Leu
305 310 315 320
Ser Val Ser Ala Glu Glu Pro Gly Ala Ile Leu Pro Ala Glu Glu Gln
325 330 335
Gly Ala Gln Leu Gly Val Val Val Ser Gly Ala Gly Ala Glu Gly Leu
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Pro Leu His Val Ala Leu His Pro Pro Glu Pro Cys Arg Arg Gly Arg
355 360 365
His Arg Val Pro Leu Ala Ser Gly Thr Ala Trp Leu Gly Leu Pro Pro
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Pro Ala Thr Glu Ala Thr Met Gly Gly Lys Arg Gln Val Ala Gly Ser
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Gly Met Tyr Ala Leu Leu Gly Val Phe Cys Val Ala Ile Phe Ile Phe
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485 490 495
Pro Asp Ser Ala Thr Asp Pro Thr Ser Pro Gln Pro His Asn Trp Val
500 505 510
Trp Leu Gly Thr Asp Gln Glu Glu Leu Ser Arg Gln Leu Asp Arg Gln
515 520 525
Ser Pro Gly Pro Pro Lys Gly Glu Gly Ser Cys Pro Cys Glu Ser Gly
530 535 540
Gly Gly Gly Glu Ala Pro Thr Leu Ala Pro Gly Pro Pro Gly Gly Thr
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Lys Arg Val Glu Phe Val Thr Phe Ala Pro Ala Pro Pro Ala Gln Ser
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Pro Glu Glu Pro Val Gly Ala Pro Ala Val Gln Ser Ile Leu Val Ala
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610 615 620
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625 630 635

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<212> DNA
<213> Homo sapiens

<220>
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<222> (72)..(1373)

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<212> PRT
<213> Homo sapiens

<400> 17884
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35 40 45
Glu Glu Lys Glu Lys Tyr Ala Glu Met Ala Arg Glu Trp Arg Ala Ala
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Gln Gly Lys Asp Pro Gly Pro Ser Glu Lys Gln Lys Pro Val Phe Thr
65 70 75 80
Pro Leu Arg Arg Pro Gly Met Leu Val Pro Lys Gln Asn Val Ser Pro
85 90 95
Pro Asp Met Ser Ala Leu Ser Leu Lys Gly Asp Gln Ala Leu Leu Gly
100 105 110
Gly Ile Phe Tyr Phe Leu Asn Ile Phe Ser His Gly Glu Leu Pro Pro
115 120 125
His Cys Glu Gln Arg Phe Leu Pro Cys Glu Ile Gly Cys Val Lys Tyr
130 135 140
Ser Leu Gln Glu Gly Ile Met Ala Asp Phe His Ser Phe Ile Asn Pro

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Ser Ser His Lys Ile Pro Ile Ser Asn Phe Glu Arg Gly His Asn Gln
            180                 185                 190
Ala Thr Val Leu Gln Asn Leu Tyr Arg Phe Ile His Pro Asn Pro Gly
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Asn Trp Pro Pro Ile Tyr Cys Lys Ser Asp Asp Arg Thr Arg Val Asn
    210                 215                 220
Trp Cys Leu Lys His Met Ala Lys Ala Ser Glu Ile Arg Gln Asp Leu
225                 230                 235                 240
Gln Leu Leu Thr Val Glu Asp Leu Val Val Gly Ile Tyr Gln Gln Lys
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Phe Leu Lys Glu Pro Ser Lys Thr Trp Ile Arg Ser Leu Leu Asp Val
            260                 265                 270
Ala Met Trp Asp Tyr Ser Ser Asn Thr Arg Cys Lys Trp His Glu Glu
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Asn Asp Ile Leu Phe Cys Ala Leu Ala Val Cys Lys Lys Ile Ala Tyr
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Cys Ile Ser Asn Ser Leu Ala Thr Leu Phe Gly Ile Gln Leu Thr Glu
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Ala His Val Pro Leu Gln Asp Tyr Glu Ala Ser Asn Ser Val Thr Pro
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Lys Met Val Val Leu Asp Ala Gly Arg Tyr Gln Lys Leu Arg Val Gly
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Ser Ser Gly Phe Ser His Phe Asn Ser Ser Asn Glu Glu Gln Arg Ser
        355                 360                 365
Asn Thr Pro Ile Gly Asp Tyr Pro Ser Arg Ala Lys Ile Ser Gly Gln
    370                 375                 380
Asn Ser Ser Val Arg Gly Arg Gly Ile Thr Arg Leu Leu Glu Ser Ile
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<212> DNA
<213> Homo sapiens

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<210> 17886
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<212> DNA
<213> Homo sapiens

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<222> (90)..(542)

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ggatttgctg acattccata ctaatataca ttgtttatgc tttctttaaa ataactagaa 1920
gaacataaaa gaaagagaat ctcagaagta gtttgctgct aatatataca tatattgtat 1980
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<210> 17887
<211> 151
<212> PRT
<213> Homo sapiens

<400> 17887
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Ala Cys Gln His Val Asn Arg Ser Glu Thr Ser Thr Ser Asp Asn Thr
35 40 45
Glu Thr Tyr Gln Glu Asn Thr Ser Ser Ser Gly His Pro Thr Phe Lys
50 55 60
Cys Pro Leu Cys Gln Glu Ser Asn Phe Thr Arg Gln Arg Leu Leu Asp
65 70 75 80

09620800 - 09 Nov 2009

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His Cys Asn Ser Asn His Leu Phe Gln Ile Val Pro Val Thr Cys Pro
                 85                  90                  95
Ile Cys Val Ser Leu Pro Trp Gly Asp Pro Ser Gln Ile Thr Arg Asn
            100                 105                 110
Phe Val Ser His Leu Asn Gln Arg His Gln Phe Asp Tyr Gly Glu Phe
        115                 120                 125
Val Asn Leu Gln Leu Asp Glu Glu Thr Gln Tyr Gln Thr Ala Val Glu
    130                 135                 140
Glu Ser Phe Gln Val Asn Ile
145                 150
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0962456-070800

<210> 17888
<211> 2041
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (93)..(1280)

<400> 17888

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aggtgcgaga tgtcttcttc aaggaggtca cggacatgaa cctgaacgtc atcaacgagg 180
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<210> 17889
<211> 396
<212> PRT
<213> Homo sapiens

<400> 17889
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35 40 45
Pro Leu Lys Met Gln Ser Cys Tyr Glu Lys Met Glu Ser Leu Arg Leu
50 55 60
Asp Gly Leu Gln Gln Arg Phe Asp Val Ser Ser Thr Ser Val Phe Lys
65 70 75 80
Gln Arg Ala Gln Ile His Met Arg Glu Gln Met Asp Asn Ala Val Tyr
85 90 95
Thr Phe Glu Thr Leu Leu His Gln Glu Leu Gly Lys Gly Pro Thr Lys
100 105 110
Glu Glu Leu Cys Lys Ser Ile Gln Arg Val Leu Glu Arg Val Leu Lys
115 120 125
Lys Tyr Asp Tyr Asp Ser Ser Ser Val Arg Lys Arg Phe Phe Arg Glu
130 135 140
Ala Leu Leu Gln Ile Ser Ile Pro Phe Leu Leu Lys Lys Leu Ala Pro
145 150 155 160
Thr Cys Lys Ser Glu Leu Pro Arg Phe Gln Glu Leu Ile Phe Glu Asp
165 170 175
Phe Ala Arg Phe Ile Leu Val Glu Asn Thr Tyr Glu Glu Val Val Leu
180 185 190
Gln Thr Val Met Lys Asp Thr Leu Gln Ala Val Lys Glu Ala Ala Val
195 200 205
Gln Arg Lys His Asn Leu Tyr Arg Asp Ser Met Val Met His Asn Ser
210 215 220
Asp Pro Asn Leu His Leu Pro Ala Glu Gly Ala Pro Ile Asp Trp Gly
225 230 235 240
Glu Glu Tyr Ser Asn Ser Gly Gly Gly Gly Ser Pro Ser Pro Ser Thr

0656050.0028800

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            260                 265                 270
Val Ser Val Val Gln Asp Glu Glu Val Gly Leu Pro Phe Glu Ala Ser
        275                 280                 285
Pro Glu Ser Pro Pro Pro Ala Ser Pro Asp Gly Val Thr Glu Ile Arg
    290                 295                 300
Gly Leu Leu Ala Gln Gly Leu Arg Pro Glu Ser Pro Pro Pro Ala Gly
305                 310                 315                 320
Pro Leu Leu Asn Gly Ala Pro Ala Gly Glu Ser Pro Gln Pro Lys Ala
                325                 330                 335
Ala Pro Glu Ala Ser Ser Pro Pro Ala Ser Pro Leu Gln His Leu Leu
            340                 345                 350
Pro Gly Lys Ala Val Asp Leu Gly Pro Pro Lys Pro Ser Asp Gln Glu
        355                 360                 365
Thr Gly Glu Gln Val Ser Ser Pro Ser Ser His Pro Ala Leu His Thr
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Thr Thr Glu Asp Ser Ala Gly Val Gln Thr Glu Phe
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<210> 17890
<211> 2047
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (37)..(1593)

<400> 17890
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09629460 - 07-SEP-2009

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<210> 17891
<211> 519
<212> PRT
<213> Homo sapiens

<400> 17891
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35 40 45
Ala Glu Asp Ile Ser Ala Asn Ser Asn Gly Pro Lys Pro Thr Glu Val
50 55 60
Val Leu Asp Asp Asp Arg Glu Asp Leu Phe Ala Glu Ala Thr Glu Glu
65 70 75 80
Val Ser Leu Asp Ser Pro Glu Arg Glu Pro Ile Leu Ser Ser Glu Pro
85 90 95
Ser Pro Ala Val Thr Pro Val Thr Pro Thr Thr Leu Ile Ala Pro Arg
100 105 110
Ile Glu Ser Lys Ser Met Ser Ala Pro Val Ile Phe Asp Arg Ser Arg
115 120 125
Glu Glu Ile Glu Glu Glu Ala Asn Gly Asp Ile Phe Asp Ile Glu Ile
130 135 140
Gly Val Ser Asp Pro Glu Lys Val Gly Asp Gly Met Asn Ala Tyr Met
145 150 155 160
Ala Tyr Arg Val Thr Thr Lys Thr Ser Leu Ser Met Phe Ser Lys Ser
165 170 175

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Glu Phe Ser Val Lys Arg Arg Phe Ser Asp Phe Leu Gly Leu His Ser
180 185 190
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195 200 205
Pro Glu Lys Ser Ile Val Gly Met Thr Lys Val Lys Val Gly Lys Glu
210 215 220
Asp Ser Ser Ser Thr Glu Phe Val Glu Lys Arg Arg Ala Ala Leu Glu
225 230 235 240
Arg Tyr Leu Gln Arg Thr Val Lys His Pro Thr Leu Leu Gln Asp Pro
245 250 255
Asp Leu Arg Gln Phe Leu Glu Ser Ser Glu Leu Pro Arg Ala Val Asn
260 265 270
Thr Gln Ala Leu Ser Gly Ala Gly Ile Leu Arg Met Val Asn Lys Ala
275 280 285
Ala Asp Ala Val Asn Lys Met Thr Ile Lys Met Asn Glu Ser Asp Ala
290 295 300
Trp Phe Glu Glu Lys Gln Gln Gln Phe Glu Asn Leu Asp Gln Gln Leu
305 310 315 320
Arg Lys Leu His Val Ser Val Glu Ala Leu Val Cys His Arg Lys Glu
325 330 335
Leu Ser Ala Asn Thr Ala Ala Phe Ala Lys Ser Ala Ala Met Leu Gly
340 345 350
Asn Ser Glu Asp His Thr Ala Leu Ser Arg Ala Leu Ser Gln Leu Ala
355 360 365
Glu Val Glu Glu Lys Ile Asp Gln Leu His Gln Glu Gln Ala Phe Ala
370 375 380
Asp Phe Tyr Met Phe Ser Glu Leu Leu Ser Asp Tyr Ile Arg Leu Ile
385 390 395 400
Ala Ala Val Lys Gly Val Phe Asp His Arg Met Lys Cys Trp Gln Lys
405 410 415
Trp Glu Asp Ala Gln Ile Thr Leu Leu Lys Lys Arg Glu Ala Glu Ala
420 425 430
Lys Met Met Val Ala Asn Lys Pro Asp Lys Ile Gln Gln Ala Lys Asn
435 440 445
Glu Ile Arg Glu Trp Glu Ala Lys Val Gln Gln Gly Glu Arg Asp Phe
450 455 460
Glu Gln Ile Ser Lys Thr Ile Arg Lys Glu Val Gly Arg Phe Glu Lys
465 470 475 480
Glu Arg Val Lys Asp Phe Lys Thr Val Ile Ile Lys Tyr Leu Glu Ser
485 490 495
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<210> 17892
<211> 2272

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1360)..(1818)

<400> 17892
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<210> 17893
<211> 153
<212> PRT
<213> Homo sapiens

<400> 17893

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Gly Lys Thr Val Val Val Thr Phe Gly Arg Asn Ser Lys Asn Tyr Phe
         35                  40                  45
Lys Lys Lys Arg Ala His Lys Ile Asn Ile Phe Leu Ser Lys Ala Cys
     50                  55                  60
His Phe Ile Cys Phe Tyr Cys Lys Phe Asn Ile Tyr Tyr Phe Lys Lys
 65                  70                  75                  80
Leu Asn Tyr Thr Glu Phe Ile Lys Tyr Asn Phe Leu Tyr Leu Pro His
                 85                  90                  95
Leu Leu Phe Leu Gly Val Thr Thr Val Asn Gly Leu Val Cys Val Leu
            100                 105                 110
Pro Asp Thr Phe Tyr Lys Tyr Thr Asn Lys Cys Val Cys Val Cys Val
        115                 120                 125
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Val Thr Leu Cys His Phe Ile Ile Tyr
145                 150
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<210> 17894
<211> 1266
<212> DNA
<213> Homo sapiens

<400> 17894

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<210> 17895
<211> 1289
<212> DNA
<213> Homo sapiens

<400> 17895
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<210> 17896
<211> 1895
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1168)..(1719)

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<213> Homo sapiens

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Val Lys Tyr Ile Glu Met Lys Arg Val Ala Glu Ala Lys Lys Ile Glu
35 40 45

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Asn Lys His Val Phe Phe Phe Asp Thr Lys Lys Glu Val Glu Gln Phe
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Asp Val Ala Thr His Leu Gln Thr Ala Pro Glu Leu Val Asp Arg Val
                 85                  90                  95
Phe Asn Arg Pro Arg Ile Glu Thr Leu Gln Lys Glu Lys Val Lys Gly
            100                 105                 110
Val Thr Asn Gln Thr Gly Leu Lys Arg Ile Ala Lys Glu Arg Gln Lys
        115                 120                 125
Gln Tyr Asn Cys Leu Thr Gln Arg Ile Glu Arg Glu Lys Lys Leu Phe
    130                 135                 140
Val Ile Ala Gln Lys Ile Gln Thr Arg Lys Asp Leu Met Asp Lys Thr
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Gln Lys Val Lys Val Lys Lys Glu Thr Val Asn Ser Pro Ala Ile Tyr
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<212> DNA
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<212> PRT
<213> Homo sapiens

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20 25 30
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35 40 45
Met Glu Leu Ser Ala Leu Gln Ser Met Met Ala Val Gln Glu Glu Glu
50 55 60
Leu Gln Val Gln Ala Ala Asp Met Glu Ser Leu Thr Arg Asn Ile Gln
65 70 75 80
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85 90 95
Gly Asn Val His Ser Ser Glu Tyr Leu
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<212> DNA
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<222> (385)..(1281)

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gattttgact ttgatgatcc agataatctg cttgaggatg actttattct tcaggccaat 360
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gagtgggaag atgtggatga tgagaaggga gatagcaatg atgactatga ctctgcaggc 480
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aaattagcat ttaaactgga gaaaagaagg caagaaaaag agctgctgaa cttgaagaag 1260
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<212> PRT
<213> Homo sapiens

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35 40 45
Ala Ile Ala Asp His Leu Phe Trp Ser Glu Glu Thr Lys Ser Arg Phe
50 55 60
Thr Glu Tyr Ser Met Thr Ser Ser Val Met Arg Arg Asn Glu Gln Leu
65 70 75 80
Thr Leu His Asp Glu Arg Phe Glu Lys Phe Tyr Glu Gln Tyr Asp Asp
85 90 95
Asp Glu Ile Gly Ala Leu Asp Asn Ala Glu Leu Glu Gly Ser Ile Gln
100 105 110

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Gln Asp Leu Pro Met Asn Glu Leu Asp Glu Ser Glu Glu Glu Glu Met
145                 150                 155                 160
Ile Thr Val Val Leu Glu Glu Ala Lys Glu Lys Trp Asp Cys Glu Ser
                165                 170                 175
Ile Cys Ser Thr Tyr Ser Asn Leu Tyr Asn His Pro Gln Leu Ile Lys
            180                 185                 190
Tyr Gln Pro Lys Pro Lys Gln Ile Arg Ile Ser Ser Lys Thr Gly Ile
        195                 200                 205
Pro Leu Asn Val Leu Pro Lys Lys Gly Leu Thr Ala Lys Gln Thr Glu
    210                 215                 220
Arg Ile Gln Met Ile Asn Gly Ser Asp Leu Pro Lys Val Ser Thr Gln
225                 230                 235                 240
Pro Arg Ser Lys Asn Glu Ser Lys Glu Asp Lys Arg Ala Arg Lys Gln
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Ala Ile Lys Glu Glu Arg Lys Glu Arg Arg Val Glu Lys Lys Ala Asn
            260                 265                 270
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<212> DNA
<213> Homo sapiens

<400> 17902

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<212> DNA
<213> Homo sapiens

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<210> 17904
<211> 1489
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (106)..(804)

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<212> PRT
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35 40 45
Arg Lys Pro Tyr Val Arg Ser Thr Gly Thr Glu Thr Gly Ser Asn Ile
50 55 60
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65 70 75 80
Gln Ser Ser Glu Ala Ala Glu Thr Gly Val Ser Glu Asn Glu Glu Asn
85 90 95
Pro Val Arg Ile Ile Ser Val Thr Pro Val Lys Asn Ile Asp Pro Val
100 105 110
Lys Asn Lys Glu Ile Asn Ser Asp Gln Ala Thr Gln Gly Asn Ile Ser
115 120 125
Ser Asp Arg Gly Lys Lys Arg Thr Val Thr Ala Ala Gly Ala Glu Asn
130 135 140
Ile Gln Gln Lys Thr Asp Glu Lys Val Asp Glu Ser Gly Pro Pro Ala
145 150 155 160
Pro Ser Lys Pro Arg Arg Gly Arg Arg Pro Lys Ser Glu Ser Gln Gly
165 170 175
Asn Ala Thr Lys Asn Asp Asp Leu Asn Lys Pro Ile Asn Lys Gly Arg
180 185 190
Lys Arg Ala Ala Val Gly Gln Glu Ser Pro Gly Gly Leu Glu Ala Gly
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Lys Thr Glu Thr Ile Asp Thr Leu Lys Gln Glu Leu Lys Asp Ile Asn
50 55 60
Cys Lys Tyr Asn Ser Ala Leu Val Asp Arg Glu Glu Ser Arg Val Leu
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Arg Phe Val Asp Ala Tyr Phe Lys Ala Tyr Pro Gly Tyr Tyr Phe Thr
     50                  55                  60
Gly Asp Gly Ala Tyr Arg Thr Glu Gly Gly Tyr Tyr Gln Ile Thr Gly
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Arg Met Asp Asp Val Ile Asn Ile Ser Gly His Arg Leu Gly Thr Ala
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Glu Ile Glu Asp Ala Ile Ala Asp His Pro Ala Val Pro Glu Ser Ala
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Val Ile Gly Tyr Pro His Asp Ile Lys Gly Glu Ala Ala Phe Ala Phe
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Ile Val Val Lys Asp Ser Ala Gly Asp Ser Asp Val Val Val Gln Glu
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Leu Lys Ser Met Val Ala Thr Lys Ile Ala Lys Tyr Ala Val Pro Asp
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Glu Ile Leu Val Val Lys Arg Leu Pro Lys Thr Arg Ser Gly Lys Val
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Met Arg Arg Leu Leu Arg Lys Ile Ile Thr Ser Glu Ala Gln Glu Leu
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<400> 17914

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<212> PRT
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35 40 45
Ser Asp Glu Ile Ile Lys Leu Leu Gly Asp Val Arg Leu Asn Ile Leu
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Val Leu Gly Gly Ser Ser Gly Phe Ile Glu Leu Tyr Ala Tyr Gly Met

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Cys Leu Ser Ser Asp Leu Lys Ser Leu Ser Val Val Thr Glu Val Ser
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Thr Asn Gly Ala Ser Glu Val Ser Tyr Phe Gln Leu Glu Thr Asn Leu
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Leu Tyr Ser Phe Leu Pro Glu Val Thr Arg Met Ala Arg Lys Phe Thr
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His Ile Ser Ala Leu Leu Gln Tyr Ile Asn Leu Ser Leu Thr Cys Met
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Cys Glu Ala Trp Glu Glu Ile Leu Met Gln Met Asp Ser Arg Leu Thr
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Lys Phe Val Gln Glu Lys Asn Thr Thr Thr Ser Val Gln Asp Glu Phe
            180                 185                 190
Met His Leu Leu Leu Trp Gly Lys Ala Ser Ala Glu Leu Gln Thr Leu
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Gln Ser Gly Ser Glu Ser Leu Leu Tyr His Leu Ser Glu Ser Lys Gly
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Gly Ile Glu Glu Ala Ile Thr Ala Val Gly Ser Phe Ile Leu Lys Ala
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Asn Glu Leu Leu Gln Val Ile Asp Ser Ser Met Lys Asn Phe Lys Ala
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Phe Phe Arg Trp Leu Tyr Val Ala Met Leu Arg Met Thr Glu Asp His
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Val Leu Pro Glu Leu Asn Lys Val Met Thr Gln Lys Asp Ile Thr Phe
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Val Ala Glu Phe Leu Thr Glu His Phe Asn Glu Ala Pro Asp Leu Tyr
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Asn Arg Lys Gly Lys Tyr Phe Asn Val Glu Arg Val Gly Gln Tyr Leu
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Lys Asp Glu Asp Asp Asp Leu Val Ser Pro Pro Asn Thr Glu Gly Asn
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Gln Trp Tyr Asp Phe Leu Gln Asn Ser Ser His Leu Lys Glu Ser Pro
385                 390                 395                 400
Leu Leu Phe Pro Tyr Tyr Pro Arg Lys Ser Leu His Phe Val Lys Arg
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Arg Met Glu Asn Ile Ile Asp Gln Cys Leu Gln Lys Pro Ala Asp Val
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Thr Arg Ser Glu Asp Ser Thr Arg Arg Leu Phe Lys Phe Pro Phe Leu
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Ser Gln Ser Val Ser Asn Gly Leu Ile Ala Ile Lys Phe Gly Ser Phe
            500                 505                 510
Thr Tyr Ala Thr Thr Glu Lys Val Arg Arg Ser Ile Tyr Ser Cys Leu
        515                 520                 525
Asp Ala Gln Phe Tyr Asp Asp Glu Thr Val Thr Val Val Leu Lys Asp
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Thr Val Gly Arg Glu Gly Arg Asp Arg Leu Leu Val Gln Leu Pro Leu
545                 550                 555                 560
Ser Leu Val Tyr Asn Ser Glu Asp Ser Ala Glu Tyr Gln Phe Thr Gly
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Thr Tyr Ser Thr Arg Leu Asp Glu Gln Cys Ser Ala Ile Pro Thr Arg
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Thr Met His Phe Glu Lys His Trp Arg Leu Leu Glu Ser Met Lys Ala
        595                 600                 605
Gln Tyr Val Ala Gly Asn Gly Phe Arg Lys Val Ser Cys Val Leu Ser
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Ser Asn Leu Arg His Val Arg Val Phe Glu Met Asp Ile Asp Asp Glu
625                 630                 635                 640
Trp Glu Leu Asp Glu Ser Ser Asp Glu Glu Glu Glu Ala Ser Asn Lys
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Pro Val Lys Ile Lys Glu Glu Val Leu Ser Glu Ser Glu Ala Glu Asn
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<213> Homo sapiens

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Thr Met Tyr Gln Asn Leu Trp Asp Thr Ala Lys Ala Met Phe Gly Glu
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Lys Cys Ile Ala Leu Asn Ala His Arg Arg Lys Gln Glu Arg Ser Lys
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Val Asn Thr Leu Thr Ser Gln Leu Lys Glu Leu Glu Lys Gln Glu Gln
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Glu Thr Val Gln Glu Lys Tyr Gln Asp Gly Val Tyr Val Leu His Pro
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Gln Tyr Arg Thr Ser Gln Pro Ile Lys Ala Asp Val Leu Phe Ile His
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Gly Leu Met Gly Ala Ala Phe Lys Thr Trp Arg Gln Gln Asp Ser Glu
405 410 415
Gln Ala Val Ile Glu Lys Pro Met Glu Asp Glu Asp Arg Tyr Thr Thr
420 425 430
Cys Trp Pro Lys Thr Trp Leu Ala Lys Asp Cys Pro Ala Leu Arg Ile
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Lys Leu Arg Ala Ala Gly Val Gly Asp Arg Pro Val Val Trp Ile Ser
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His Ser Met Gly Gly Leu Leu Val Lys Lys Met Leu Leu Glu Ala Ser
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Thr Lys Pro Glu Met Ser Thr Val Ile Asn Asn Thr Arg Gly Ile Ile
515 520 525
Phe Tyr Ser Val Pro His His Gly Ser Arg Leu Ala Glu Tyr Ser Val
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Lys Asp Ser Pro Ala Leu Lys Thr Leu Gln Asp Asp Phe Leu Glu Phe
565 570 575
Ala Lys Asp Lys Asn Phe Gln Val Leu Asn Phe Val Glu Thr Leu Pro
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Thr Tyr Ile Gly Ser Met Ile Lys Leu His Val Val Pro Val Glu Ser
595 600 605
Ala Asp Leu Gly Ile Gly Asp Leu Ile Pro Val Asp Val Asn His Leu
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<212> DNA
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<212> PRT
<213> Homo sapiens

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35 40 45
Phe Lys Leu Asn Gln Asp Asn Tyr Ile Leu Gln Ala Lys Leu Ser Ser
50 55 60
Phe Glu Glu Thr Asn Lys Lys Gln Arg Trp Leu His Phe Gly Glu Ala
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Ala Asp Pro Val Thr Gly Glu Lys Leu Lys Gln Ile Gln Lys Glu Ile
85 90 95
Gln Glu Gln Glu Thr Leu Leu Gln Gly Tyr Gln Gln Glu Asn Glu Arg
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Leu Tyr Asn Gln Val Lys Asp Leu Gln Glu Gln Asn Lys Lys Asn Glu
115 120 125
Glu Arg Met Phe Lys Glu Asn Gln Ser Leu Phe Ser Glu Val Ala Ser
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225                 230                 235                 240
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Glu Lys Leu Lys Leu Glu Ile Glu Lys Leu Lys Ala Glu Ser Gly Asn
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Pro Ser Ile Arg Gln Lys Ile Arg Leu Lys Asp Lys Ala Ala Asp Ala
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Gln Ser Lys Gln Glu Ser Leu Val Val Ser Glu Val Arg Glu Glu Ile
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Leu Gln Lys Glu Ile Thr Lys Leu Leu Glu Glu Leu Arg Glu Ala Lys
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Glu Asn His Thr Pro Glu Met Lys His Phe Val Gly Leu Glu Lys Lys
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705                 710                 715                 720
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<212> DNA
<213> Homo sapiens

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<211> 1887
<212> DNA
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<213> Homo sapiens

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<213> Homo sapiens

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35 40 45
Gly Ala Gly Ala Tyr Ile Leu Ser Arg Phe Ala Leu Asn His Pro Glu
50 55 60
Leu Val Glu Gly Leu Val Leu Ile Asn Val Asp Pro Cys Ala Lys Gly
65 70 75 80
Trp Ile Asp Trp Ala Ala Ser Lys Leu Ser Gly Leu Thr Thr Asn Val
85 90 95
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145                 150                 155                 160
Lys Thr Leu Lys Cys Ser Thr Leu Leu Val Val Gly Asp Asn Ser Pro
                165                 170                 175
Ala Val Glu Ala Val Val Glu Cys Asn Ser Arg Leu Asn Pro Ile Asn
            180                 185                 190
Thr Thr Leu Leu Lys Met Ala Asp Cys Gly Gly Leu Pro Gln Val Val
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Gln Pro Gly Lys Leu Thr Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met
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Gly Tyr Ile Pro Ser Ala Ser Met Thr Arg Leu Ala Arg Ser Arg Thr
225                 230                 235                 240
His Ser Thr Ser Ser Ser Leu Gly Ser Gly Glu Ser Pro Phe Ser Arg
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<400> 17945

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<212> DNA
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Ala Ile Asn Arg Asp Thr Ala Phe Pro Gly Ala Ser His Glu Ser Ser
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Cys Phe Leu Thr Leu Arg Leu Ser Ala Ser Gln Asn Cys Leu Lys Lys
20 25 30
Ser Leu Glu Asp Val Val Ile Asp Ile Gln Ser Ser Leu Ser Lys Gly
35 40 45
Ile Arg Gly Asn Glu Pro Val Tyr Thr Ser Thr Gln Glu Asp Cys Ile
50 55 60
Asn Ser Cys Cys Ser Thr Lys Asn Ile Ser Gly Asp Lys Ala Cys Asn

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 65                  70                  75                  80
Leu Met Ile Phe Asp Thr Arg Lys Thr Ala Arg Gln Pro Asn Cys Tyr
                85                  90                  95
Leu Phe Phe Cys Pro Asn Glu Glu Ala Cys Pro Leu Lys Pro Ala Lys
            100                 105                 110
Gly Leu Met Ser Tyr Arg Ile Ile Thr Asp Phe Pro Ser Leu Thr Arg
        115                 120                 125
Asn Leu Pro Ser Gln Glu Leu Pro Gln Glu Asp Ser Leu Leu His Gly
    130                 135                 140
Gln Phe Ser Gln Ala Val Thr Pro Leu Ala His His His Thr Asp Tyr
145                 150                 155                 160
Ser Lys Pro Thr Asp Ile Ser Trp Arg Asp Thr Leu Ser Gln Lys Phe
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Gly Ser Ser Asp His Leu Glu Lys Leu Phe Lys Met Asp Glu Ala Ser
            180                 185                 190
Ala Gln Leu Leu Ala Tyr Lys Glu Lys Gly His Ser Gln Ser Ser Gln
        195                 200                 205
Phe Ser Ser Asp Gln Glu Ile Ala His Leu Leu Pro Glu Asn Val Ser
    210                 215                 220
Ala Leu Pro Ala Thr Val Ala Val Ala Ser Pro His Thr Thr Ser Ala
225                 230                 235                 240
Thr Pro Lys Pro Ala Thr Leu Leu Pro Thr Asn Ala Ser Val Thr Pro
                245                 250                 255
Ser Gly Thr Ser Gln Pro Gln Leu Ala Thr Thr Ala Pro Pro Val Thr
            260                 265                 270
Thr Val Thr Ser Gln Pro Pro Thr Thr Leu Ile Ser Thr Val Phe Thr
        275                 280                 285
Arg Ala Ala Ala Thr Leu Gln Ala Met Ala Thr Thr Ala Val Leu Thr
    290                 295                 300
Thr Thr Phe Gln Ala Pro Thr Asp Ser Lys Gly Ser Leu Glu Thr Ile
305                 310                 315                 320
Pro Phe Thr Glu Ile Ser Asn Leu Thr Leu Asn Thr Gly Asn Val Tyr
                325                 330                 335
Asn Pro Thr Ala Leu Ser Met Ser Asn Val Glu Ser Ser Thr Met Asn
            340                 345                 350
Lys Thr Ala Ser Trp Glu Gly Arg Glu Ala Ser Pro Gly Ser Ser Ser
        355                 360                 365
Gln Gly Ser Val Pro Glu Asn Gln Tyr Gly Leu Pro Phe Glu Lys Trp
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Leu Leu Ile Gly Ser Leu Leu Phe Gly Val Leu Phe Leu Val Ile Gly
385                 390                 395                 400
Leu Val Leu Leu Gly Arg Ile Leu Ser Glu Ser Leu Arg Arg Lys Arg
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Tyr Ser Arg Leu Asp Tyr Leu Ile Asn Gly Ile Tyr Val Asp Ile
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<210> 17951

0960360.0250800

0950450.0950800

<211> 2025
<212> DNA
<213> Homo sapiens

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gaccttctgg accaccagga cctccgggag ccggcgggtt gccaggacac aacggagtgg 300
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atttgggtcg actaaaactg tgtgcagcag gggtaaggtg tttcatctct gcacagttta 480
aggccggttt aactcttacc tagaagccgt tgcgttccgg gataccaagg gtatacttct 540
tggtcccacc ttgacagatg tttatttcaa actggagaag ccgtctcctg ggaactgact 600
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cattctgtgg gccgtgtgac agctggtgct ggtgcatgct ctttcgaggc tcagctcctg 720
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<210> 17952
<211> 2178
<212> DNA
<213> Homo sapiens

<220>
<221> CDS

<222> (716)..(1792)

<400> 17952
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actgagcaga gcagagcatc gagccaaagg ggagatgagt ttgtctgtcc tctgctgagg 180
ctacggccgg gcctagggaa ctgggagctt gggtggaagc gacacccgtg gaagtgggag 240
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aagaggactc tgttggactg ttttttttttc tttttctttt ttttaagaaa aacccatttt 660
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<210> 17953
<211> 359
<212> PRT
<213> Homo sapiens

<400> 17953

0060209.0002

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            20                  25                  30
Pro Pro Gly Ala Glu Glu Arg Val Pro Glu Glu Asp Ser Arg Trp Gln
        35                  40                  45
Ser Arg Ala Phe Pro Gln Leu Gly Gly Arg Pro Gly Pro Glu Gly Glu
    50                  55                  60
Gly Ser Leu Glu Ser Gln Pro Pro Pro Leu Gln Thr Gln Ala Cys Pro
65                  70                  75                  80
Glu Ser Ser Cys Leu Arg Glu Gly Glu Lys Gly Gln Asn Gly Asp Asp
                85                  90                  95
Ser Ser Ala Gly Gly Asp Phe Pro Pro Pro Ala Glu Val Glu Pro Thr
            100                 105                 110
Pro Glu Ala Glu Leu Leu Ala Gln Pro Cys His Asp Ser Glu Ala Ser
        115                 120                 125
Lys Leu Gly Ala Pro Ala Ala Gly Gly Glu Glu Glu Trp Gly Gln Gln
    130                 135                 140
Gln Arg Gln Leu Gly Lys Lys Lys His Arg Arg Arg Pro Ser Lys Lys
145                 150                 155                 160
Lys Arg His Trp Lys Pro Tyr Tyr Lys Leu Thr Trp Glu Glu Lys Lys
                165                 170                 175
Lys Phe Asp Glu Lys Gln Ser Leu Arg Ala Ser Arg Ile Arg Ala Glu
            180                 185                 190
Met Phe Ala Lys Gly Gln Pro Val Ala Pro Tyr Asn Thr Thr Gln Phe
        195                 200                 205
Leu Met Asp Asp His Asp Gln Glu Glu Pro Asp Leu Lys Thr Gly Leu
    210                 215                 220
Tyr Ser Lys Arg Ala Ala Ala Lys Ser Asp Asp Thr Ser Asp Asp Asp
225                 230                 235                 240
Phe Met Glu Glu Gly Gly Glu Glu Asp Gly Gly Ser Asp Gly Met Gly
                245                 250                 255
Gly Asp Gly Ser Glu Phe Leu Gln Arg Asp Phe Ser Glu Thr Tyr Glu
            260                 265                 270
Arg Tyr His Thr Glu Ser Leu Gln Asn Met Ser Lys Gln Glu Leu Ile
        275                 280                 285
Lys Glu Tyr Leu Glu Leu Glu Lys Cys Leu Ser Arg Met Glu Asp Glu
    290                 295                 300
Asn Asn Arg Leu Arg Leu Glu Ser Lys Arg Leu Gly Gly Asp Asp Ala
305                 310                 315                 320
Arg Val Arg Glu Leu Glu Leu Glu Leu Asp Arg Leu Arg Ala Glu Asn
                325                 330                 335
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<210> 17954
<211> 1925
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (899)..(1456)

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gcacaaaacc tggctcctat caagcttctg catctatttt tttttctatt tttctctcaa 180
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aacattttat cataggtaca cttataattt tgatatgatc tcagtattaa cctgataact 300
cccaaattga tattttccta gttcaactga aattaaaggg agaaatatgg gattgtagga 360
gtgccttgtc ctcaaattga ctgtatttct gttttgagaa agatcttggt actgatcacg 420
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gcataaaacc agaaattaag tcttagattt agtttctaca tcttttattg gaagatgact 540
gtagataaat atctttctgt atatcatttt aataaatgag aaaagagagc tgttgaatga 600
aagatcatga acatcagtat ttatctgagg aacatcctgc ggaggaatcc ctttccccat 660
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tctttgagtt tcatggccaa agtgttaact agttttacta caatgtttgg tgtttgtgtg 1860
gaaattatct gcctggtgtg tgcacacaag tcttacttgg aataaattta ctggtacaaa 1920
ttctt 1925

<210> 17955
<211> 186
<212> PRT

0090204600.070800

<213> Homo sapiens

<400> 17955

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            20                  25                  30
Ala Pro Ser Arg Ile Val Val Val Ser Ser Lys Leu Tyr Lys Tyr Gly
        35                  40                  45
Asp Ile Asn Phe Asp Asp Leu Asn Ser Glu Gln Ser Tyr Asn Lys Ser
    50                  55                  60
Phe Cys Tyr Ser Arg Ser Lys Leu Ala Asn Ile Leu Phe Thr Arg Glu
65                  70                  75                  80
Leu Ala Arg Arg Leu Glu Gly Thr Asn Val Thr Val Asn Val Leu His
                85                  90                  95
Pro Gly Ile Val Arg Thr Asn Leu Gly Arg His Ile His Ile Pro Leu
            100                 105                 110
Leu Val Lys Pro Leu Phe Asn Leu Val Ser Trp Ala Phe Phe Lys Thr
        115                 120                 125
Pro Ile Glu Gly Ala Gln Thr Ser Ile Tyr Leu Ala Ser Ser Pro Glu
    130                 135                 140
Val Glu Gly Val Ser Gly Arg Tyr Phe Gly Asp Cys Lys Glu Glu Glu
145                 150                 155                 160
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Ile Ser Glu Val Met Val Gly Leu Leu Lys
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<210> 17956
<211> 2626
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (5)..(2626)

<400> 17956

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ttatttacta tatgatcatg aagcacaaca ttataatacg tacacttgta agttcacagg 180
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0605945.0049880

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<211> 874
<212> PRT
<213> Homo sapiens

<400> 17957
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20 25 30
Gly Arg Ile Phe Ser Glu Ala Tyr Leu Leu Tyr Asp His Glu Ala Gln

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Pro Glu Lys Val Leu Pro Pro Glu Ala Gln Leu Asn Ser Ser Gly Asp
                 85                  90                  95
Ser Ile Gln Pro Ser Glu Val Asn Gln Asn Thr Ala Glu Asn Ile Glu
            100                 105                 110
Lys Glu Arg Ser Met Leu Pro Ser Glu Asn Asn Ile Glu Asn Ser Leu
        115                 120                 125
Leu Ala Asp Arg Ser Asp Ala Trp Asp Lys Ser Lys Ala Val Ser Ala
    130                 135                 140
Val Thr Lys Gln Asp Gln Ile Ser Ala Ser Glu Leu Arg Gln Ala Asn
145                 150                 155                 160
Gly Pro Leu Ser Asn Gly Leu Glu Asn Pro Ala Thr Thr Pro Leu Leu
                165                 170                 175
Gln Ser Ser Glu Val Ala Val Ser Ile Lys Val Ser Leu Asn Gln Gly
            180                 185                 190
Ile Glu Asp Asn Phe Gly Lys Gln Glu Asn Ser Thr Val Glu Gly Ser
        195                 200                 205
Gly Glu Ala Leu Val Thr Asp Leu His Thr Pro Val Glu Asp Thr Cys
    210                 215                 220
Asn Asp Leu Cys His Pro Gly Phe Gln Glu Arg Lys Glu Gln Asp Cys
225                 230                 235                 240
Phe Asn Asp Ala His Val Thr Gln Asp Ser Leu Val Asn Ser Glu Thr
                245                 250                 255
Leu Lys Ile Gly Asp Leu Thr Pro Gln Asn Leu Glu Arg Gln Val Asn
            260                 265                 270
Asn Leu Met Thr Phe Ser Val Gln Asn Gln Ala Ala Phe Gln Asn Asn
        275                 280                 285
Leu Pro Thr Ser Lys Phe Glu Cys Gly Asp Asn Val Lys Thr Ser Ser
    290                 295                 300
Asn Leu Tyr Asn Leu Pro Leu Lys Thr Leu Glu Ser Ile Ala Phe Val
305                 310                 315                 320
Pro Pro Gln Ser Asp Leu Ser Asn Ser Leu Gly Thr Pro Ser Val Pro
                325                 330                 335
Pro Lys Ala Pro Val Gln Lys Phe Ser Cys Gln Val Glu Gly Cys Thr
            340                 345                 350
Arg Thr Tyr Asn Ser Ser Gln Ser Ile Gly Lys His Met Lys Thr Ala
        355                 360                 365
His Pro Asp Gln Tyr Ala Ala Phe Lys Met Gln Arg Lys Ser Lys Lys
    370                 375                 380
Gly Gln Lys Ala Asn Asn Leu Asn Thr Pro Asn Asn Gly Lys Phe Val
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Tyr Phe Leu Pro Ser Pro Val Asn Ser Ser Asn Pro Phe Phe Thr Ser
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Gln Thr Lys Ala Asn Gly Asn Pro Ala Cys Ser Ala Gln Leu Gln His
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Val Ser Pro Pro Ile Phe Pro Ala His Leu Ala Ser Val Ser Thr Pro
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Asp Lys Asn Glu Gln Gly Gly Met Leu Cys Ser Gln Met Glu Asn Leu
465                 470                 475                 480
Pro Ser Thr Ala Leu Pro Ala Gln Met Glu Asp Leu Thr Lys Thr Val
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Ala Glu Ser Ser Ser Met Ser Leu Phe Pro Ser Pro Ala Asp Ser Gly
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Thr Asn Ser Val Phe Ser Gln Leu Glu Asn Asn Thr Asn His Tyr Ser
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Ser Gln Ile Glu Gly Asn Thr Asn Ser Ser Phe Leu Lys Gly Gly Asn
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Gly Glu Asn Ala Val Phe Pro Ser Gln Val Asn Val Ala Asn Asn Phe
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Glu Leu Leu Gln Ser Asn Gly Gln Pro Ser Leu Leu Ala Ser Met Ile
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        675                 680                 685
Asn Pro Glu Ala Cys Phe Lys Asp Pro Ser Phe Leu Gln Leu Leu Ala
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705                 710                 715                 720
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Lys Gln Ala Leu Glu Thr Ala Gly Ile Pro Ser Thr Phe Glu Gly Ala
            740                 745                 750
Glu Met Leu Ser His Val Ser Thr Gly Cys Val Ser Asp Ala Ser Gln
        755                 760                 765
Val Asn Ala Thr Val Met Pro Ser Pro Thr Val Pro Pro Leu Leu His
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Thr Val Cys His Pro Asn Thr Leu Leu Thr Asn Gln Asn Arg Thr Ser
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<210> 17958
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<212> DNA
<213> Homo sapiens

<400> 17958

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<212> DNA
<213> Homo sapiens

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<222> (650)..(1000)

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<212> PRT
<213> Homo sapiens

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35 40 45
Thr Glu Asp Met Ser Asp Leu Pro Cys Glu Ser Gln Arg Ser Ile Pro
50 55 60
Leu Ala Val Thr Asp Ala Leu Glu His Ile Met Glu Gln Leu Asn Val
65 70 75 80
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (843)..(1205)

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<212> PRT
<213> Homo sapiens

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35 40 45
Phe Ser Cys Gln Leu Leu Leu Phe Ser Cys Gln Leu Leu Leu Phe Ser
50 55 60
Ser Lys Ala Ile Asn Pro Pro Gln Pro Gly His His Asn Val His Ala
65 70 75 80
Thr Glu Cys Ser Lys Lys Leu Ser Ala Glu Thr Leu Arg Pro Trp Thr
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Glu Arg Arg Gly Arg Glu Pro Met Arg
115 120

<210> 17964
<211> 2353
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

<400> 17965
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<212> DNA
<213> Homo sapiens

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<220>
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<222> (1207)..(1545)

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<212> PRT
<213> Homo sapiens

<400> 17968
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Ala Phe Leu Tyr Leu Leu Ile Phe Pro Gln Ala Phe Pro Phe Leu Ser
35 40 45
Cys Ile Phe Pro Leu Phe Trp Gln Thr Cys Met Gly Lys Asp Val Thr
50 55 60
Leu His Val Ser Ala Ser Asn Pro Ala Met Leu Leu Tyr Gln Lys Phe
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<210> 17969
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<212> DNA
<213> Homo sapiens

<220>
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<222> (877)..(1215)

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0088270 09/05/2006

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<210> 17970
<211> 113
<212> PRT
<213> Homo sapiens

<400> 17970
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Gln Asp Ala Val Ser Glu Gly Trp Lys Trp Met Leu Gly Gly Glu Thr
35 40 45
Ala Glu Thr His Pro Gly Pro Arg Pro Cys Leu Ser Lys Ile His Ala

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Asp Val Cys Thr Ala Pro His Arg Cys His Pro His Pro Trp Lys Leu
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<210> 17971
<211> 2155
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1660)..(2154)

<400> 17971

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<210> 17972
<211> 165
<212> PRT
<213> Homo sapiens

<400> 17972
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35 40 45
Ser Leu Glu Gln Ser Ile Gly Glu Cys Leu Ala Met Thr Arg Arg Phe
50 55 60
Pro Leu His His Gly Glu Pro Gln Glu Met Val Leu Lys Gln Thr Pro
65 70 75 80
Lys His Arg Leu Leu Pro Ala Leu Cys Arg Cys Cys Leu Leu His Ala
85 90 95
Leu Glu Gln Val Glu Pro Trp Cys Ser Val Val Ala His Asp Ser Leu
100 105 110
Ser Lys Gln His Phe Thr Glu Glu Asn Leu Tyr Phe Val Ile Cys Val
115 120 125
Ser Ser Gly Ile Asp Thr Gln Lys Lys Ser His Leu Glu Ile Phe Pro
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Leu Pro Tyr Ile Cys
165

<210> 17973
<211> 1855
<212> DNA
<213> Homo sapiens

<400> 17973
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Val Ala Glu Trp Leu His Leu Asp Asp Asp Gly Gly Pro Pro Glu Gly
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Lys	Asn	Ile	Ile	Ile	Ala	Leu	Ile	Asp	Arg	Leu	Ala	Leu	Phe	Ala	His
				165					170					175	
Arg	Glu	Asp	Gly	Pro	Gly	Ile	Pro	Ala	Asp	Ile	Lys	Leu	Phe	Asp	Ile
			180					185					190		
Phe	Ser	Gln	Gln	Val	Ala	Thr	Val	Ile	Gln	Ser	Arg	Gln	Asp	Met	Pro
		195					200					205			
Ser	Glu	Asp	Val	Val	Ser	Leu	Gln	Val	Ser	Leu	Ile	Asn	Leu	Ala	Met
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245 250 255
Ser Ala Val Ser Lys Glu Leu Thr Arg Leu Leu Lys Ile Pro Val Asp
260 265 270
Thr Tyr Asn Asn Ile Leu Thr Val Leu Lys Leu Lys His Phe His Pro
275 280 285
Leu Phe Glu Tyr Phe Asp Tyr Glu Ser Arg Lys Ser Met Ser Cys Tyr
290 295 300
Val Leu Ser Asn Val Leu Asp Tyr Asn Thr Glu Ile Val Ser Gln Asp
305 310 315 320
Gln Val Asp Ser Ile Met Asn Leu Val Ser Thr Leu Ile Gln Asp Gln
325 330 335
Pro Asp Gln Pro Val Glu Asp Pro Asp Pro Glu Asp Phe Ala Asp Glu
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Gln Ser Leu Val Gly Arg Phe Ile His Leu Leu Arg Ser Glu Asp Pro
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370 375 380
Gly Gly Asn Gln Arg Ile Arg Phe Thr Leu Pro Pro Leu Val Phe Ala
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Ala Tyr Gln Leu Ala Phe Arg Tyr Lys Glu Asn Ser Lys Val Asp Asp
405 410 415
Lys Trp Glu Lys Lys Cys Gln Lys Ile Phe Ser Phe Ala His Gln Thr
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Phe Leu Gln Gly Ala Leu Ala Ala Gly Glu Ile Gly Phe Glu Asn His
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Glu Thr Val Ala Tyr Glu Phe Met Ser Gln Ala Phe Ser Leu Tyr Glu
465 470 475 480
Asp Glu Ile Ser Asp Ser Lys Ala Gln Leu Ala Ala Ile Thr Leu Ile
485 490 495
Ile Gly Thr Phe Glu Arg Met Lys Cys Phe Ser Glu Glu Asn His Glu
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Pro Leu Arg Thr Gln Cys Ala Leu Ala Ala Ser Lys Leu Leu Lys Lys
515 520 525
Pro Asp Gln Gly Arg Ala Val Ser Thr Cys Ala His Leu Phe Trp Ser
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Gly Arg Asn Thr Asp Lys Asn Gly Glu Glu Leu His Gly Gly Lys Arg
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Asp Pro Ser Leu Gln Val Gln Leu Phe Ile Glu Ile Leu Asn Arg Tyr
580 585 590
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Ser Glu Glu Thr Glu Gln Ile Asn Lys His Phe His Asn Thr Leu Glu
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<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 17996

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Pro Gln Thr Gly Leu Phe Tyr Arg Ser Ala Leu Thr Gln Ser Gln Ser
        35                  40                  45
Ala Lys Gln Gln Lys Leu Ser Gln Pro Pro Leu Glu Gln Thr Gln Leu
    50                  55                  60
Gln Val Lys Thr Leu Gln Cys Phe Gln Thr Lys Gln Lys Gln Thr Ile
65                  70                  75                  80
His Leu Gln Ala Asp Gln Leu Gln His Lys Leu Pro Gln Met Pro Gln
                85                  90                  95
Leu Ser Ile Arg His Gln Lys Leu Thr Pro Leu Gln Gln Glu Gln Ala
            100                 105                 110
Gln Pro Lys Pro Asp Val Gln His Thr Gln His Pro Met Val Ala Lys
        115                 120                 125
Asp Arg Gln Leu Pro Thr Leu Met Ala Gln Pro Pro Gln Thr Val Val
    130                 135                 140
Gln Val Leu Ala Val Lys Thr Thr Gln Gln Leu Pro Lys Leu Gln Gln
145                 150                 155                 160
Ala Pro Asn Gln Pro Lys Ile Tyr Val Gln Pro Gln Thr Pro Gln Ser
                165                 170                 175
Gln Met Ser Leu Pro Ala Ser Ser Glu Lys Gln Thr Ala Ser Gln Val
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Glu Gln Pro Ile Ile Thr Gln Gly Ser Ser Val Thr Lys Ile Thr Phe
        195                 200                 205
Glu Gly Arg Gln Pro Pro Thr Val Thr Lys Ile Thr Gly Gly Ser Ser
    210                 215                 220
Val Pro Lys Leu Thr Ser Pro Val Thr Ser Ile Ser Pro Ile Gln Ala
225                 230                 235                 240
Ser Glu Lys Thr Ala Val Ser Asp Ile Leu Lys Met Ser Leu Met Glu
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Ala Gln Ile Asp Thr Asn Val Glu His Met Ile Val Asp Pro Pro Lys
            260                 265                 270
Lys Ala Leu Ala Thr Ser Met Leu Thr Gly Glu Ala Gly Ser Leu Pro
        275                 280                 285
Ser Thr His Met Val Val Ala Gly Met Ala Asn Ser Thr Pro Gln Gln
    290                 295                 300
Gln Lys Cys Arg Glu Ser Cys Ser Ser Pro Ser Thr Val Gly Ser Ser
305                 310                 315                 320
Leu Thr Thr Arg Lys Ile Asp Pro Pro Ala Val Pro Ala Thr Gly Gln
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Phe Met Arg Ile Gln Asn Val Gly Gln Lys Lys Ala Glu Glu Ser Pro
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Ala Glu Ile Ile Ile Gln Ala Ile Pro Gln Tyr Ala Ile Pro Cys His
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Ser Ser Ser Asn Val Val Val Glu Pro Ser Gly Leu Leu Glu Leu Asn
    370                 375                 380
Asn Phe Thr Ser Gln Gln Leu Asp Asp Glu Glu Thr Ala Met Glu Gln
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                405                 410                 415
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<211> 127
<212> PRT
<213> Homo sapiens

<400> 17998
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20 25 30
Asn Val Thr Lys His Ser Ala Gly Asn His Ser Ser Met His Ile Arg
35 40 45
Lys Leu Thr Gln Glu Arg Ser His Ile Tyr Ala Val Ile Val Glu Lys
50 55 60
Ala Ser Phe Arg Arg Glu Ile Ser Leu Tyr Ile Ser Glu Phe Ile Leu
65 70 75 80
Glu Lys Asn Pro Ile Tyr Ala Met Asn Val Glu Lys Ala Ser Ser Lys
85 90 95
Arg Ala Thr Ser Leu Phe Ile Asp Val Leu Thr Leu Glu Arg Asn Pro
100 105 110
Met Asn Ala Met Asn Val Gly Lys Ala Ser Ala Arg Arg His Val
115 120 125

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<211> 2020
<212> DNA
<213> Homo sapiens

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<211> 2299
<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

<400> 18002

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			20					25					30		
Leu	Cys	Tyr	Tyr	Trp	Leu	Asn	Thr	Val	Ala	Leu	Ser	Gly	Glu	Glu	Cys
		35					40					45			
Trp	Glu	Thr	Leu	Ile	Gly	Gln	Asp	Ile	Tyr	Arg	Leu	Leu	Leu	Met	Asp
	50					55					60				
Phe	Val	Phe	Ser	Leu	Val	Asn	Ser	Phe	Leu	Gly	Glu	Phe	Leu	Arg	Arg
65					70					75					80
Ile	Ile	Gly	Met	Gln	Leu	Ile	Thr	Ser	Leu	Gly	Leu	Gln	Glu	Phe	Asp
				85					90					95	
Ile	Ala	Arg	Asn	Val	Leu	Glu	Leu	Ile	Tyr	Ala	Gln	Thr	Leu	Val	Trp
			100					105					110		
Ile	Gly	Ile	Phe	Phe	Cys	Pro	Leu	Leu	Pro	Phe	Ile	Gln	Met	Ile	Met
		115					120					125			
Leu	Phe	Ile	Met	Phe	Tyr	Ser	Lys	Asn	Ile	Ser	Leu	Met	Met	Asn	Phe
	130					135					140				
Gln	Pro	Pro	Ser	Lys	Ala	Trp	Arg	Ala	Ser	Gln	Met	Met	Thr	Phe	Phe
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EP1572960-A2-20050914

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Ala Ile Thr Ile Trp Arg Leu Lys Pro Ser Ala Asp Cys Gly Pro Phe
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Arg Gly Leu Pro Leu Phe Ile His Ser Ile Tyr Ser Trp Ile Asp Thr
        195                 200                 205
Leu Ser Thr Arg Pro Gly Tyr Leu Trp Val Val Trp Ile Tyr Arg Asn
    210                 215                 220
Leu Ile Gly Ser Val His Phe Phe Phe Ile Leu Thr Leu Ile Val Leu
225                 230                 235                 240
Ile Ile Thr Tyr Leu Tyr Trp Gln Ile Thr Glu Gly Arg Lys Ile Met
                245                 250                 255
Ile Arg Leu Leu His Glu Gln Ile Ile Asn Glu Gly Lys Asp Lys Met
            260                 265                 270
Phe Leu Ile Glu Lys Leu Ile Lys Leu Gln Asp Met Glu Lys Lys Ala
        275                 280                 285
Asn Pro Ser Ser Leu Val Leu Glu Arg Arg Glu Val Glu Gln Gln Gly
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<210> 18003
<211> 1988
<212> DNA
<213> Homo sapiens

<400> 18003

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0052950-0072800

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<210> 18004
<211> 1909
<212> DNA
<213> Homo sapiens

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09/503,600

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<210> 18005
<211> 1626
<212> DNA
<213> Homo sapiens

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<211> 2375
<212> DNA

09600.0045.00US

<213> Homo sapiens

<220>
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<222> (342)..(1811)

<400> 18006
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<210> 18007
<211> 490
<212> PRT
<213> Homo sapiens

<400> 18007

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Asn Tyr Cys Asp Gly Arg Glu Thr Ser Glu Thr Thr Ala Met Leu Gln
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Asp Glu Asp Ile Ser Ser Asp Gly Asp Glu Asp Ala Ile Val Glu Val
     50                  55                  60
Thr Pro Lys Leu Pro Lys Glu Ser Ser Gly Ile Met Ala Leu Gln Ile
 65                  70                  75                  80
Leu Val Pro Phe Leu Leu Ala Gly Phe Gly Thr Val Ser Ala Gly Met
                 85                  90                  95
Val Leu Asp Ile Val Gln His Trp Glu Val Phe Arg Lys Val Thr Glu
            100                 105                 110
Val Phe Ile Leu Val Pro Ala Leu Leu Gly Leu Lys Gly Asn Leu Glu
        115                 120                 125
Met Thr Leu Ala Ser Arg Leu Ser Thr Ala Val Asn Ile Gly Lys Met
    130                 135                 140
Asp Ser Pro Ile Glu Lys Trp Asn Leu Ile Ile Gly Asn Leu Ala Leu
145                 150                 155                 160
Lys Gln Val Gln Ala Thr Val Val Gly Phe Leu Ala Ala Val Ala Ala
                165                 170                 175
Ile Ile Leu Gly Trp Ile Pro Glu Gly Lys Tyr Tyr Leu Asp His Ser
            180                 185                 190
Ile Leu Leu Cys Ser Ser Ser Val Ala Thr Ala Phe Ile Ala Ser Leu
        195                 200                 205
Leu Gln Gly Ile Ile Met Val Gly Val Ile Val Gly Ser Lys Lys Thr
    210                 215                 220
Gly Ile Asn Pro Asp Asn Val Ala Thr Pro Ile Ala Ala Ser Phe Gly
225                 230                 235                 240
Asp Leu Ile Thr Leu Ala Ile Leu Ala Trp Ile Ser Gln Gly Leu Tyr
                245                 250                 255
Ser Cys Leu Glu Thr Tyr Tyr Tyr Ile Ser Pro Leu Val Gly Val Phe
            260                 265                 270
Phe Leu Ala Leu Thr Pro Ile Trp Ile Ile Ile Ala Ala Lys His Pro
        275                 280                 285
Ala Thr Arg Thr Val Leu His Ser Gly Trp Glu Pro Val Ile Thr Ala
    290                 295                 300
Met Val Ile Ser Ser Ile Gly Gly Leu Ile Leu Asp Thr Thr Val Ser
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Asp Pro Asn Leu Val Gly Ile Val Val Tyr Thr Pro Val Ile Asn Gly
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0560260 - 0560260

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        355                 360                 365
Cys Tyr Tyr Pro Phe Arg Thr Phe Phe Gly Pro Gly Val Asn Asn Lys
    370                 375                 380
Ser Ala Gln Val Leu Leu Leu Leu Val Ile Pro Gly His Leu Ile Phe
385                 390                 395                 400
Leu Tyr Thr Ile His Leu Met Lys Ser Gly His Thr Ser Leu Thr Ile
                405                 410                 415
Ile Phe Ile Val Val Tyr Leu Phe Gly Ala Val Leu Gln Val Phe Thr
            420                 425                 430
Leu Leu Trp Ile Ala Asp Trp Met Val His His Phe Trp Arg Lys Gly
        435                 440                 445
Lys Asp Pro Asp Ser Phe Ser Ile Pro Tyr Leu Thr Ala Leu Gly Asp
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<211> 2158
<212> DNA
<213> Homo sapiens

<220>
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<222> (208)..(2157)

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<211> 650
<212> PRT
<213> Homo sapiens

<400> 18009

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			20					25				30			
Leu	Leu	Gln	Tyr	Val	Ala	Asn	Gln	Leu	Lys	Ala	Gly	Lys	Ser	Phe	Asp
		35					40					45			
Leu	Leu	Ile	Leu	Lys	Glu	Val	Val	Gln	Lys	Met	Ala	Gly	Ile	Glu	Ile
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Thr	Glu	Glu	Met	Thr	Met	Glu	Gln	Leu	Glu	Ala	Met	Thr	Gly	Gly	Glu
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Gln	Leu	Lys	Ala	Glu	Gly	Gly	Tyr	Phe	Gly	Gln	Ile	Arg	Asn	Thr	Lys
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Lys	Ser	Ser	Gln	Arg	Leu	Lys	Asp	Ala	Leu	Leu	Asp	His	Asp	Leu	Ala
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Leu	Pro	Leu	Cys	Leu	Leu	Met	Ala	Gln	Gln	Arg	Asn	Gly	Val	Ile	Phe
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Gln	Glu	Gly	Gly	Glu	Lys	His	Leu	Lys	Leu	Val	Gly	Lys	Leu	Tyr	Asp
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Pro Met Tyr Ala His His Ile Ser Ser Lys Tyr Asp Glu Leu Lys Lys
        195                 200                 205
Ser Glu Lys Gly Ser Lys Gln Gln His Lys Val His Lys Tyr Ile Thr
    210                 215                 220
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225                 230                 235                 240
His Val Ser Lys Val Trp Asp Asp Ile Ser Pro Gln Phe Tyr Ala Thr
                245                 250                 255
Phe Trp Ser Leu Thr Met Tyr Asp Leu Ala Val Pro His Thr Ser Tyr
            260                 265                 270
Glu Arg Glu Val Asn Lys Leu Lys Val Gln Met Lys Ala Ile Asp Asp
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Asn Gln Glu Met Pro Pro Asn Lys Lys Lys Lys Glu Lys Glu Arg Cys
    290                 295                 300
Thr Ala Leu Gln Asp Lys Leu Leu Glu Glu Glu Lys Lys Gln Met Glu
305                 310                 315                 320
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Cys Ala Arg Phe Val Glu Leu Val His Gln Gln Lys Thr Pro Asn Phe
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Ser Thr Leu Leu Cys Tyr Asp Arg Val Phe Ser Asp Ile Ile Tyr Thr
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Val Ala Ser Cys Thr Glu Asn Glu Ala Ser Arg Tyr Gly Arg Phe Leu
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Cys Cys Met Leu Glu Thr Val Thr Arg Trp His Ser Asp Arg Ala Thr
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Tyr Glu Lys Glu Cys Gly Asn Tyr Pro Gly Phe Leu Thr Ile Leu Arg
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Ala Thr Gly Phe Asp Gly Gly Asn Lys Ala Asp Gln Leu Asp Tyr Glu
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Asn Phe Arg His Val Val His Lys Trp His Tyr Lys Leu Thr Lys Ala
465                 470                 475                 480
Ser Val His Cys Leu Glu Thr Gly Glu Tyr Thr His Ile Arg Asn Ile
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Leu Ile Val Leu Thr Lys Ile Leu Pro Trp Tyr Pro Lys Val Leu Asn
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Leu Gly Gln Ala Leu Glu Arg Arg Val His Lys Ile Cys Gln Glu Glu
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Lys Glu Lys Arg Pro Asp Leu Tyr Ala Leu Ala Met Gly Tyr Ser Gly
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Pro Gly Gly Gly Pro Ser Ser Ser Ser Ile Gly Ser Ala Ser Lys Ser
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Asp Glu Ser Ser Thr Glu Glu Thr Asp Lys Ser Arg Glu Arg Ser Gln
        595                 600                 605
Cys Gly Val Lys Ala Val Asn Lys Ala Ser Ser Thr Thr Pro Lys Gly
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<212> PRT
<213> Homo sapiens

<400> 18011

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			20					25					30		
Leu	Arg	Arg	Arg	Gly	Val	Val	Ser	Asp	His	Cys	Tyr	Pro	Phe	Ser	Gly
		35					40					45			
Arg	Glu	Arg	Asp	Glu	Ala	Gly	Pro	Ala	Pro	Pro	Cys	Met	Met	His	Ser
	50					55					60				
Arg	Ala	Met	Gly	Arg	Gly	Lys	Arg	Gln	Ala	Thr	Ala	His	Cys	Pro	Asn
65					70					75					80
Ser	Tyr	Val	Asn	Asn	Asn	Asp	Ile	Tyr	Gln	Val	Thr	Pro	Val	Tyr	Arg
				85					90					95	
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			100					105					110		
Pro	Val	Gln	Ala	Leu	Met	Glu	Val	His	Glu	Asp	Phe	Phe	Leu	Tyr	Glu
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Tyr	Arg	Arg	His	Gly	Thr	His	Ser	Val	Lys	Ile	Thr	Gly	Trp	Gly	Glu
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Glu	Thr	Leu	Pro	Asp	Gly	Arg	Thr	Leu	Lys	Tyr	Trp	Thr	Ala	Ala	Asn
				165					170					175	
Ser	Trp	Gly	Pro	Ala	Trp	Gly	Glu	Arg	Gly	His	Phe	Arg	Ile	Val	Arg
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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

<400> 18014

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         35                  40                  45
Asp Lys Asp Glu Glu Ser Arg Ile Cys Lys Ala Leu Phe Leu Tyr Thr
     50                  55                  60
Ser His Leu Arg Lys Tyr Asn Asp Ala Leu Ile Ile Ser Glu His Ala
 65                  70                  75                  80
Arg Met Lys Asp Ala Leu Asp Tyr Leu Lys Asp Phe Phe Ser Asn Val
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Arg Ala Ala Gly Phe Asp Glu Ile Glu Gln Asp Leu Thr Gln Arg Phe
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Glu Glu Lys Leu Gln Glu Leu Glu Ser Val Ser Arg Asp Pro Ser Asn
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Phe Leu Lys Pro Gly Ile Leu Thr Gly Arg Gly Lys Thr Asn Gln Asn
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Tyr Lys Thr Phe Glu Ile Pro Val Ile Lys Ile Glu Ser Phe Val Val
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0008290 6950290

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Gln Phe Tyr Ile Ser Arg Gln Trp Leu Asn Lys Phe Lys Thr Phe Ala
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Glu Pro Gly Pro Ile Ser Asn Asn Asp Phe Leu Cys Ile His Gly Gly
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225                 230                 235                 240
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<213> Homo sapiens

<220>
<221> CDS
<222> (638)..(1087)

<400> 18022
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<210> 18023
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<212> PRT
<213> Homo sapiens

<400> 18023
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Arg Leu Ala Thr Val Tyr Tyr Ser Leu His Met Tyr Glu Met Ala Glu
35 40 45
Asp Cys Tyr Leu Lys Thr Leu Ser Leu Cys Pro Pro Trp Leu Gln Ser
50 55 60
Pro Lys Glu Ala Leu Tyr Tyr Ala Lys Val Tyr Tyr Arg Leu Gly Arg
65 70 75 80
Leu Thr Phe Cys Gln Leu Lys Asp Ala His Asp Ala Thr Glu Tyr Phe
85 90 95
Leu Leu Ala Leu Ala Ala Ala Val Leu Leu Gly Asp Glu Glu Leu Gln
100 105 110
Asp Thr Ile Arg Ser Arg Leu Asp Asn Ile Cys Gln Ser Pro Leu Trp
115 120 125
His Ser Arg Pro Ser Gly Cys Ser Ser Glu Arg Ala Arg Trp Leu Ser
130 135 140
Gly Gly Gly Leu Ala Leu
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<213> Homo sapiens

<220>
<221> CDS
<222> (748)..(1659)

0960204.0002800

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<211> 304
<212> PRT
<213> Homo sapiens

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35 40 45

Ala Val Arg Lys Leu Lys Phe Ala Arg His Ile Lys Lys Ser Glu Gly
50 55 60
Gln Lys Ile Pro Lys Val Glu Leu Gln Ile Ser Ile Tyr Gly Val Lys
65 70 75 80
Ile Leu Glu Pro Lys Thr Lys Glu Val Gln His Asn Cys Gln Leu His
85 90 95
Arg Ile Ser Phe Cys Ala Asp Asp Lys Thr Asp Lys Arg Ile Phe Thr
100 105 110
Phe Ile Cys Lys Asp Ser Glu Ser Asn Lys His Leu Cys Tyr Val Phe
115 120 125
Asp Ser Glu Lys Cys Ala Glu Glu Ile Thr Leu Thr Ile Gly Gln Ala
130 135 140
Phe Asp Leu Ala Tyr Arg Lys Phe Leu Glu Ser Gly Gly Lys Asp Val
145 150 155 160
Glu Thr Arg Lys Gln Ile Ala Gly Leu Gln Lys Arg Ile Gln Asp Leu
165 170 175
Glu Thr Glu Asn Met Glu Leu Lys Asn Lys Val Gln Asp Leu Glu Asn
180 185 190
Gln Leu Arg Ile Thr Gln Val Ser Ala Pro Pro Ala Gly Ser Met Thr
195 200 205
Pro Lys Ser Pro Ser Thr Asp Ile Phe Asp Met Ile Pro Phe Ser Pro
210 215 220
Ile Ser His Gln Ser Ser Met Pro Thr Arg Asn Gly Thr Gln Pro Pro
225 230 235 240
Pro Val Pro Ser Arg Ser Thr Glu Ile Lys Arg Asp Leu Phe Gly Ala
245 250 255
Glu Pro Phe Asp Pro Phe Asn Cys Gly Ala Ala Asp Phe Pro Pro Asp
260 265 270
Ile Gln Ser Lys Leu Asp Glu Met Gln Glu Gly Phe Lys Met Gly Leu
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (791)..(1807)

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0502050.0002

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<211> 339
<212> PRT
<213> Homo sapiens

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Val Gln His Leu Ile His Leu Cys Glu Glu Lys Arg Ala Ser Ile Ser
    50                  55                  60
Asp Ala Ala Leu Leu Asp Ile Ile Tyr Met Gln Phe His Gln His Gln
65                  70                  75                  80
Lys Val Trp Asp Val Phe Gln Met Ser Lys Gly Pro Gly Glu Asp Val
                85                  90                  95
Asp Leu Phe Asp Met Lys Gln Phe Lys Asn Ser Phe Lys Lys Ile Leu
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Gln Arg Ala Leu Lys Asn Val Thr Val Ser Phe Arg Glu Thr Glu Glu
        115                 120                 125
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    130                 135                 140
Asn Gln Tyr Lys Pro Thr Tyr Val Val Tyr Tyr Ser Gln Thr Pro Tyr
145                 150                 155                 160
Ala Phe Thr Ser Ser Ser Met Leu Arg Arg Asn Thr Pro Leu Leu Gly
                165                 170                 175
Gln Ala Leu Thr Ile Ala Ser Lys His His Gln Ile Val Lys Met Asp
            180                 185                 190
Leu Arg Ser Arg Tyr Leu Asp Ser Leu Lys Ala Ile Val Phe Lys Gln
        195                 200                 205
Tyr Asn Gln Thr Phe Glu Thr His Asn Ser Thr Thr Pro Leu Gln Glu
    210                 215                 220
Arg Ser Leu Gly Leu Asp Ile Asn Met Asp Ser Arg Ile Ile His Glu
225                 230                 235                 240
Asn Ile Val Glu Lys Glu Arg Val Gln Arg Ile Thr Gln Glu Thr Phe
                245                 250                 255
Gly Asp Tyr Pro Gln Pro Gln Leu Glu Phe Ala Gln Tyr Lys Leu Glu
            260                 265                 270
Thr Lys Phe Lys Ser Gly Leu Asn Gly Ser Ile Leu Ala Glu Arg Glu
        275                 280                 285
Glu Pro Leu Arg Cys Leu Ile Lys Phe Ser Ser Pro His Leu Leu Glu
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Ala Leu Lys Ser Leu Ala Pro Ala Gly Ile Ala Asp Ala Pro Leu Ser
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<211> 1895
<212> DNA
<213> Homo sapiens

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0962546.0-0002800

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<221> CDS
<222> (790)..(1125)

<400> 18028
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<210> 18029
<211> 112
<212> PRT
<213> Homo sapiens

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        35                  40                  45
Gly Ser Phe Arg Val Thr Thr Ala Thr Glu Gln Ala Glu Arg Glu Glu
    50                  55                  60
Ile Met Lys Gln Met Gln Asp Ala Lys Lys Gly Thr Ile Cys Ser Thr
65                  70                  75                  80
Val Cys Ile Tyr Gly Met Gln Phe Phe Pro Thr Arg Tyr Tyr Phe Glu
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Ala Thr Gly Gly Lys Phe Ser His Asn Gln Arg Glu Pro Leu Ala Ile
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<210> 18030
<211> 2746
<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (89)..(2539)

<400> 18030

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<212> PRT
<213> Homo sapiens

<400> 18031

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			20					25					30		
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		35					40					45			
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Ile	Ser	Tyr	Glu	Asn	Thr	Gln	Ile	Ser	Arg	Ala	Ile	Trp	Ala	Ala	Leu
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Gln	Thr	Gln	Thr	Ser	Asn	Ala	Ala	Lys	Asn	Phe	Ile	Thr	Lys	Met	Ala
				85					90					95	
Lys	Glu	Gly	Ala	Ala	Glu	Ala	Leu	Ala	Ala	Gly	Ala	Asp	Ile	Ala	Glu
			100					105					110		
Phe	Ser	Val	Gly	Gly	Met	Asp	Phe	Ser	Leu	Phe	Lys	Glu	Val	Phe	Glu
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Ile Ile Gly Pro Leu Glu Asp Ser Glu Leu Phe Asn Gln Asp Asp Phe
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His Leu Leu Glu Asn Ile Ile Leu Lys Thr Ser Gly Gln Lys Ile Lys
            180                 185                 190
Ser His Ile Gln Gln Leu Arg Val Glu Glu Asp Val Ala Ser Asp Leu
        195                 200                 205
Val Met Lys Val Asp Ala Leu Leu Ser Ala Gln Pro Lys Gly Asp Pro
    210                 215                 220
Arg Ile Glu Tyr Gln Phe Phe Glu Asp Arg His Ser Ala Ile Lys Leu
225                 230                 235                 240
Arg Pro Lys Glu Gly Glu Thr Tyr Phe Asp Val Val Ala Val Val Asp
                245                 250                 255
Pro Val Thr Arg Glu Ala Gln Arg Leu Ala Pro Leu Leu Leu Val Leu
            260                 265                 270
Ala Gln Leu Ile Asn Met Asn Leu Arg Val Phe Met Asn Cys Gln Ser
        275                 280                 285
Lys Leu Ser Asp Met Pro Leu Lys Ser Phe Tyr Arg Tyr Val Leu Glu
    290                 295                 300
Pro Glu Ile Ser Phe Thr Ser Asp Asn Ser Phe Ala Lys Gly Pro Ile
305                 310                 315                 320
Ala Lys Phe Leu Asp Met Pro Gln Ser Pro Leu Phe Thr Leu Asn Leu
                325                 330                 335
Asn Thr Pro Glu Ser Trp Met Val Glu Ser Val Arg Thr Pro Tyr Asp
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Leu Asp Asn Ile Tyr Leu Glu Glu Val Asp Ser Val Val Ala Ala Glu
        355                 360                 365
Tyr Glu Leu Glu Tyr Leu Leu Leu Glu Gly His Cys Tyr Asp Ile Thr
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Thr Gly Gln Pro Pro Arg Gly Leu Gln Phe Thr Leu Gly Thr Ser Ala
385                 390                 395                 400
Asn Pro Val Ile Val Asp Thr Ile Val Met Ala Asn Leu Gly Tyr Phe
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Gln Leu Lys Ala Asn Pro Gly Ala Trp Ile Leu Arg Leu Arg Lys Gly
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Arg Ser Glu Asp Ile Tyr Arg Ile Tyr Ser His Asp Gly Thr Asp Ser
        435                 440                 445
Pro Pro Asp Ala Asp Glu Val Val Ile Val Leu Asn Asn Phe Lys Ser
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Lys Ile Ile Lys Val Lys Val Gln Lys Lys Ala Asp Met Val Asn Glu
465                 470                 475                 480
Asp Leu Leu Ser Asp Gly Thr Ser Glu Asn Glu Ser Gly Phe Trp Asp
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Ser Phe Lys Trp Gly Phe Thr Gly Gln Lys Thr Glu Glu Val Lys Gln
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Asp Lys Asp Asp Ile Ile Asn Ile Phe Ser Val Ala Ser Gly His Leu
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Tyr Glu Arg Phe Leu Arg Ile Met Met Leu Ser Val Leu Lys Asn Thr
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Lys Thr Pro Val Lys Phe Trp Phe Leu Lys Asn Tyr Leu Ser Pro Thr
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Phe Lys Glu Phe Ile Pro Tyr Met Ala Asn Glu Tyr Asn Phe Gln Tyr
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Glu Leu Val Gln Tyr Lys Trp Pro Arg Trp Leu His Gln Gln Thr Glu
            580                 585                 590
Lys Gln Arg Ile Ile Trp Gly Tyr Lys Ile Leu Phe Leu Asp Val Leu
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Phe Pro Leu Val Val Asp Lys Phe Leu Phe Val Asp Ala Asp Gln Ile
    610                 615                 620
Val Arg Thr Asp Leu Lys Glu Leu Arg Asp Phe Asn Leu Asp Gly Ala
625                 630                 635                 640
Pro Tyr Gly Tyr Thr Pro Phe Cys Asp Ser Arg Arg Glu Met Asp Gly
                645                 650                 655
Tyr Arg Phe Trp Lys Ser Gly Tyr Trp Ala Ser His Leu Ala Gly Arg
            660                 665                 670
Lys Tyr His Ile Ser Ala Leu Tyr Val Val Asp Leu Lys Lys Phe Arg
        675                 680                 685
Lys Ile Ala Ala Gly Asp Arg Leu Arg Gly Gln Tyr Gln Gly Leu Ser
    690                 695                 700
Gln Asp Pro Asn Ser Leu Ser Asn Leu Asp Gln Asp Leu Pro Asn Asn
705                 710                 715                 720
Met Ile His Gln Val Pro Ile Lys Ser Leu Pro Gln Glu Trp Leu Trp
                725                 730                 735
Cys Glu Thr Trp Cys Asp Asp Ala Ser Lys Lys Arg Thr Lys Thr Ile
            740                 745                 750
Asp Leu Cys Asn Asn Pro Met Thr Lys Glu Pro Lys Leu Glu Ala Ala
        755                 760                 765
Val Arg Ile Val Pro Glu Trp Gln Asp Tyr Asp Gln Glu Ile Lys Gln
    770                 775                 780
Leu Gln Ile Arg Phe Gln Lys Glu Lys Glu Thr Gly Ala Leu Tyr Lys
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<213> Homo sapiens

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atatggaagc tgtggacttg aggatttaca cttaaggaag gatggggaaa atgtgggtga 240
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<213> Homo sapiens

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Glu Asp Leu His Leu Arg Lys Asp Gly Glu Asn Val Gly Glu Cys Lys
35 40 45
Asp Gln Lys Glu Ile Tyr Asn Gly Leu Asn Gln Cys Leu Ser Thr Leu
50 55 60
Pro Ser Lys Ile Phe Pro Tyr Asn Lys Cys Val Lys Val Phe Ser Lys

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Ser Ser Asn Leu Asn Arg Glu Asn Ile Arg His Thr Thr Glu Lys Leu
                85                  90                  95
Phe Lys Cys Met Gln Cys Gly Lys Val Phe Lys Ser His Ser Gly Leu
            100                 105                 110
Ser Tyr His Lys Ile Ile His Thr Glu Glu Lys Leu Cys Ile Cys Glu
        115                 120                 125
Glu Cys Gly Lys Thr Phe Lys Trp Phe Ser Tyr Leu Thr Lys His Lys
    130                 135                 140
Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys
145                 150                 155                 160
Ala Phe Asn Trp Cys Ser Ser Leu Thr Lys His Lys Arg Ile His Thr
                165                 170                 175
Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe His Trp
            180                 185                 190
Cys Ser Pro Phe Val Arg His Lys Lys Ile His Thr Gly Glu Lys Pro
        195                 200                 205
Tyr Thr Cys Glu Asp Cys Gly Arg Ala Phe Asn Arg His Ser His Leu
    210                 215                 220
Thr Lys His Lys Thr Ile His Thr Gly Lys Lys Pro Tyr Lys Cys Lys
225                 230                 235                 240
Glu Cys Gly Lys Ala Phe Asn His Cys Ser Leu Leu Thr Ile His Glu
                245                 250                 255
Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys
            260                 265                 270
Ala Phe Asn Ser Ser Ser Ile Leu Thr Glu His Lys Val Ile His Ser
        275                 280                 285
Gly Glu Lys Pro Tyr Lys Cys Glu Lys Cys Asp Lys Val Phe Lys Arg
    290                 295                 300
Phe Ser Tyr Leu Thr Lys His Lys Arg Ile His Thr Gly Glu Lys Pro
305                 310                 315                 320
Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Asn Trp Ser Ser Ile Leu
                325                 330                 335
Thr Glu His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Asn Cys Glu
            340                 345                 350
Glu Cys Gly Lys Ala Phe Asn Arg Cys Ser His Leu Leu Asp Ile Arg
        355                 360                 365
Lys Phe Ile Leu Pro Ser Asn Ala Ile Asn Val Lys Asn Val Ala Lys
    370                 375                 380
Leu Leu Asn Gly Ala His Ile Leu Met Asn Ile Arg Glu Phe Lys Glu
385                 390                 395                 400
Glu Arg Asn Pro Ala Ser Ile Lys Asn Val Gly Lys Leu Leu Ile Thr
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<213> Homo sapiens

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<400> 18035

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Ser Val Cys Lys Tyr Tyr Leu Cys Gly Phe Cys Pro Ala Glu Leu Phe
        35                  40                  45
Thr Asn Thr Arg Ser Asp Leu Gly Pro Cys Glu Lys Ile His Asp Glu
    50                  55                  60
Asn Leu Arg Lys Gln Tyr Glu Lys Ser Ser Arg Phe Met Lys Val Gly
65                  70                  75                  80
Tyr Glu Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val
                85                  90                  95
Glu Arg Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn
            100                 105                 110
Gln Gln Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Glu Glu Lys
        115                 120                 125
Ile Gln Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu
    130                 135                 140
Glu Leu Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys
145                 150                 155                 160
Leu Val Glu Gln Leu Lys Glu Glu Arg Glu Leu Leu Arg Ser Thr Thr
                165                 170                 175
Ser Thr Ile Glu Ser Phe Ala Ala Gln Glu Lys Gln Met Glu Val Cys
            180                 185                 190
Glu Val Cys Gly Ala Phe Leu Ile Val Gly Asp Ala Gln Ser Arg Val
        195                 200                 205
Asp Asp His Leu Met Gly Lys Gln His Met Gly Tyr Ala Lys Ile Lys
    210                 215                 220
Ala Thr Val Glu Glu Leu Lys Glu Lys Leu Arg Lys Arg Thr Glu Glu
225                 230                 235                 240
Pro Asp Arg Asp Glu Arg Leu Lys Lys Glu Lys Gln Glu Arg Glu Glu
                245                 250                 255
Arg Glu Lys Glu Arg Glu Arg Glu Arg Glu Glu Arg Glu Arg Lys Arg
            260                 265                 270
Arg Arg Glu Glu Glu Glu Arg Glu Lys Glu Arg Ala Arg Asp Arg Glu
        275                 280                 285
Arg Arg Lys Arg Ser Arg Ser Arg Ser Arg His Ser Ser Arg Thr Ser
    290                 295                 300
Asp Arg Arg Cys Ser Arg Ser Arg Asp His Lys Arg Ser Arg Ser Arg
305                 310                 315                 320
Glu Arg Arg Arg Ser Arg Ser Arg Asp Arg Arg Arg Ser Arg Ser His
                325                 330                 335
Asp Arg Ser Glu Arg Lys His Arg Ser Arg Ser Arg Asp Arg Arg Arg
            340                 345                 350
Ser Lys Ser Arg Asp Arg Lys Ser Tyr Lys His Arg Ser Lys Ser Arg
        355                 360                 365
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Asp Asp Lys Lys Ser Ser Val Lys Ser Gly Ser Arg Glu Lys Gln Ser
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<212> DNA
<213> Homo sapiens

<220>
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<222> (207)..(1268)

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<400> 18037

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260 265 270
Thr Met Asp Leu Val Leu Glu Met Cys Asn Thr Asn Ser Ile His Trp
275 280 285
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Tyr Thr Glu Phe Pro Glu Phe Ser Arg Arg Leu Ile Lys Asp Leu Glu
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115 120 125
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180 185 190
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195 200 205
Leu Lys Ala Glu Gln Asp Glu Arg Lys Arg Glu Glu Glu Glu Arg Arg
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Glu Val Glu Leu Ala Leu Glu Glu Val Glu Lys Ala Gly Glu Glu Gln
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Thr Leu Leu Ser Arg Arg Gly Glu Asp Ser Asp Tyr Arg Ser Gln Leu
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Ser Lys Lys Asn Tyr Glu Leu Ile Gln Tyr Leu Asp Glu Ile Gln Thr
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Leu Thr Glu Ala Asn Glu Lys Ile Glu Val Gln Asn Gln Glu Met Arg
225                 230                 235                 240
Lys Asn Leu Glu Glu Ser Val Gln Glu Met Glu Lys Met Thr Asp Glu
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Tyr Asn Arg Met Lys Ala Ile Val His Gln Thr Asp Asn Val Ile Asp
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Gln Leu Lys Lys Glu Asn Asp His Tyr Gln Leu Gln Val Gln Glu Leu
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Thr Asp Leu Leu Lys Ser Lys Asn Glu Glu Asp Asp Pro Ile Met Val
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Ala Val Asn Ala Lys Val Glu Glu Trp Lys Leu Ile Leu Ser Ser Lys
305                 310                 315                 320
Asp Asp Glu Ile Ile Glu Tyr Gln Gln Met Leu His Asn Leu Arg Glu
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Lys Leu Lys Asn Ala Gln Leu Asp Ala Asp Lys Ser Asn Val Met Ala
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Leu Gln Gln Gly Ile Gln Glu Arg Asp Ser Gln Ile Lys Met Leu Thr
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Ile Glu Asp Leu Lys Asn Glu Leu Gln Arg Asn Lys Gly Ala Ser Thr
385                 390                 395                 400
Leu Ser Gln Gln Thr His Met Lys Ile Gln Ser Thr Leu Asp Ile Leu
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Lys Glu Lys Thr Lys Glu Ala Glu Arg Thr Ala Glu Leu Ala Glu Ala
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Asp Ala Arg Glu Lys Asp Lys Glu Leu Val Glu Ala Leu Lys Arg Leu
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Lys Asp Tyr Glu Ser Gly Val Tyr Gly Leu Glu Asp Ala Val Val Glu
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Ile Lys Asn Cys Lys Asn Gln Ile Lys Ile Arg Asp Arg Glu Ile Glu
465                 470                 475                 480
Ile Leu Thr Lys Glu Ile Asn Lys Leu Glu Leu Lys Ile Ser Asp Phe
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Leu Asp Glu Asn Glu Ala Leu Arg Glu Arg Val Gly Leu Glu Pro Lys
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Thr Met Ile Asp Leu Thr Glu Phe Arg Asn Ser Lys His Leu Lys Gln
        515                 520                 525
Gln Gln Tyr Arg Ala Glu Asn Gln Ile Leu Leu Lys Glu Ile Glu Cys
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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 278
<212> PRT
<213> Homo sapiens

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Pro Leu Pro Val Pro Pro Glu Leu Ala Pro Phe Val Gly Arg Met Ser
35 40 45
Ala Gln Glu Ser Thr Pro Ile Met Asn Gly Val Thr Gly Pro Asp Gly
50 55 60

09609409.030900

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Glu Asp Tyr Ser Pro Trp Ala Asp Arg Lys Ala Ala Gln Pro Lys Ser
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Leu Ser Pro Pro Gln Ser Gln Ser Lys Leu Ser Asp Ser Tyr Ser Asn
                85                  90                  95
Thr Leu Pro Val Arg Lys Ser Val Thr Pro Lys Asn Ser Tyr Ala Thr
            100                 105                 110
Thr Glu Asn Lys Thr Leu Pro Arg Ser Ser Ser Met Ala Ala Gly Leu
        115                 120                 125
Glu Arg Asn Gly Arg Met Arg Val Lys Ala Ile Phe Ser His Ala Ala
    130                 135                 140
Gly Asp Asn Ser Thr Leu Leu Ser Phe Lys Glu Gly Asp Leu Ile Thr
145                 150                 155                 160
Leu Leu Val Pro Glu Ala Arg Asp Gly Trp His Tyr Gly Glu Ser Glu
                165                 170                 175
Lys Thr Lys Met Arg Gly Trp Phe Pro Phe Ser Tyr Thr Arg Val Leu
            180                 185                 190
Asp Ser Asp Gly Ser Asp Arg Leu His Met Ser Leu Gln Gln Gly Lys
        195                 200                 205
Ser Ser Ser Thr Gly Asn Leu Leu Asp Lys Asp Asp Leu Ala Ile Pro
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Pro Pro Asp Tyr Gly Ala Ala Ser Arg Ala Phe Pro Ala Gln Thr Ala
225                 230                 235                 240
Ser Gly Phe Lys Gln Arg Pro Tyr Ser Val Ala Val Pro Ala Phe Ser
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<212> DNA
<213> Homo sapiens

<220>
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<222> (201)..(794)

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<211> 198
<212> PRT
<213> Homo sapiens

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Thr Gln Ala Lys Ala Ala Lys Ala Arg Ala Lys Ala Lys Ala Ala Leu
35 40 45

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Val Lys Ala Lys Ala Lys Ala Lys Ala Ala Gln Val Lys Ala Lys Ala
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Lys Val Met Ala Ala Arg Ala Lys Ala Lys Ala Lys Ala Lys Ala Val
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Arg Ala Lys Ala Lys Val Ala Arg Thr Gln Pro Arg Gly Arg Gly Arg
                85                  90                  95
Pro Lys Gly Ser Ala Lys Ala Arg Thr Thr Arg Lys Gly Gln Lys Asn
            100                 105                 110
Arg Pro Glu Thr Val Gly Gln Lys Arg Lys Arg Ala Glu Glu Ala Lys
        115                 120                 125
Asp Leu Pro Pro Lys Lys Arg Thr Arg Leu Gly Pro Arg Ser Pro Lys
    130                 135                 140
Ala Trp Leu Gly Pro Gly Thr Ala Lys Leu Leu Lys Phe Arg Ala Ile
145                 150                 155                 160
Lys Val Asp Arg Arg Ser Ser Asp Asp Glu Val Arg Gln Arg Ala Gln
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Arg Ile Leu Arg Val Asn Leu Ser Pro Val Ile Arg Leu Gln Pro Leu
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Leu Pro Tyr Ser Ala Val
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<210> 18050
<211> 1705
<212> DNA
<213> Homo sapiens

<220>
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<222> (21)..(752)

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<211> 244
<212> PRT
<213> Homo sapiens

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Lys Lys Trp Phe Pro Tyr Phe Leu Val Arg Phe Thr Val Ile Tyr Asn
35 40 45
Glu Gln Met Ala Ser Lys Lys Arg Glu Leu Phe Ser Asn Leu Gln Glu
50 55 60
Phe Ala Gly Pro Ser Gly Lys Leu Ser Leu Leu Glu Val Gly Cys Gly
65 70 75 80
Thr Gly Ala Asn Phe Lys Phe Tyr Pro Pro Gly Cys Arg Val Thr Cys
85 90 95
Ile Asp Pro Asn Pro Asn Phe Glu Lys Phe Leu Ile Lys Ser Ile Ala
100 105 110
Glu Asn Arg His Leu Gln Phe Glu Arg Phe Val Val Ala Ala Gly Glu
115 120 125
Asn Met His Gln Val Ala Asp Gly Ser Val Asp Val Val Val Cys Thr
130 135 140
Leu Val Leu Cys Ser Val Lys Asn Gln Glu Arg Ile Leu Arg Glu Val
145 150 155 160
Cys Arg Val Leu Arg Pro Gly Gly Ala Phe Tyr Phe Met Glu His Val
165 170 175
Ala Ala Glu Cys Ser Thr Trp Asn Tyr Phe Trp Gln Gln Val Leu Asp
180 185 190
Pro Ala Trp His Leu Leu Phe Asp Gly Cys Asn Leu Thr Arg Glu Ser
195 200 205
Trp Lys Ala Leu Glu Arg Ala Ser Phe Ser Lys Leu Lys Leu Gln His

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Tyr Ala Val Lys

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (39)..(1460)

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<212> PRT
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Pro Asp Tyr Pro Ser Ser Ser Pro Pro Ser Phe Thr Leu Ser Gly Lys
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Gln Lys Ala Leu Glu Glu Met Glu Ser Lys Glu Trp Leu Glu Lys Asn
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<212> DNA
<213> Homo sapiens

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Lys Glu Arg Gln Gln Lys Thr Asp Met Gln Tyr Ala Ala Lys Val Tyr
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<212> DNA
<213> Homo sapiens

<220>
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<222> (19)..(723)

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         35                  40                  45
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     50                  55                  60
Ile Asp Asn Ser Gly Leu Leu Lys Asp Gly Asp Ala Gln Ser Leu Lys
 65                  70                  75                  80
Glu His Leu Ile Asp Glu Leu Asp Tyr Ile Leu Leu Pro Thr Glu Gly
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Trp Asn Lys Leu Val Ser Trp Tyr Thr Leu Met Glu Gly Gln Glu Pro
            100                 105                 110
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Thr Arg Leu Trp Asn Lys Tyr Met Ser Asn Thr Phe Glu Pro Leu Asn
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Lys Pro Asp Ser Thr Ile Gln Asp Ala Gly Leu Tyr Gln Gly Gln Val
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<211> 1995
<212> DNA
<213> Homo sapiens

<220>
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<222> (620)..(1924)

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Ile Arg Gln Met Leu Phe Val Ser Gly Glu Arg Leu Ile Ser Asp Pro
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Ala Gly Glu Leu Gly Arg Val Gln Asp Phe Leu Gly Leu Lys Arg Ile
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Ile Thr Asp Lys His Phe Tyr Phe Asn Lys Thr Lys Gly Phe Pro Cys
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Leu Lys Lys Ala Glu Gly Ser Ser Arg Pro His Cys Leu Gly Lys Thr
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Lys Gly Arg Thr His Pro Glu Ile Asp Arg Glu Val Val Arg Arg Leu
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<212> PRT
<213> Homo sapiens

<400> 18069

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Cys Val Leu Gln Val His Ala Ala Lys Val Ile Pro Ala His Pro Cys
         35                  40                  45
Pro Val Ser Val Ser Phe Arg Val Ile Pro Tyr Leu Ser Ile Gly Cys
     50                  55                  60
Leu Ile Leu Leu Asp Phe Leu Lys Thr Leu Arg Trp Ser Ile Arg Ser
 65                  70                  75                  80
Asp Phe Ser His Ser Ser Ala Gly Glu Leu Arg Ile Thr Ser Ser Phe
                 85                  90                  95
Gly Arg Trp Ser Arg Val Arg Gly Cys Trp Tyr Thr Val Phe Ile Val
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<213> Homo sapiens

<400> 18073

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Glu Thr Ala Ser Leu Arg Glu Leu Gly Leu Asn Glu Thr Glu Ile Leu
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Ile Trp Lys Ser His Val Ser Gly Glu Lys Lys Thr Lys Leu Arg Ala
            100                 105                 110
Thr Pro Glu Ala Ile Gln Asn Arg Leu Gln Asp Ile Glu Glu Arg Ile
        115                 120                 125
Ser Glu Arg Gln Arg Ile Leu Cys Leu Pro Gln Arg Phe Ala Lys Ser
    130                 135                 140
Lys Gln Leu Thr Arg Arg Glu Met Glu Ile Glu Lys Ser Leu Phe Gln
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Gly Ala Asp Arg His Ser Phe Leu Lys Ala Leu Tyr Tyr Gln Ala Tyr
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His Lys Lys Thr Ser Ala Asp Lys Tyr Met Thr Ser Met Lys Arg Lys
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225 230 235 240
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260 265 270
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Gly Lys Leu Ser Phe Thr Pro
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35 40 45
Lys Val Ser Ser Val Trp Ala Met Ala His Thr Cys Asn Ser Asn Thr
50 55 60
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65 70 75 80
Ser Leu Gly Asn Lys Leu Asp Pro Met Ser Leu Lys Asn Val Lys Asn
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<220>

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<221> CDS
<222> (287)..(1711)

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Asp Ile Met Val Ala His Lys Lys Ser Glu Trp Glu Gly Arg Thr His

0062946-070800

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Lys Gln Glu Leu Lys Lys Leu His Glu Glu Leu Cys Ile Leu Lys Arg
            100                 105                 110
Ser Tyr Glu Lys Leu Gln Lys Lys Gln Met Arg Glu Phe Arg Gly Asn
        115                 120                 125
Thr Lys Asn His Arg Glu Asp Arg Ser Glu Ile Glu Arg Leu Thr Ala
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Lys Ile Glu Glu Phe Arg Gln Lys Ser Leu Asp Trp Glu Lys Gln Arg
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Leu Ile Tyr Gln Gln Gln Val Ser Ser Leu Glu Ala Gln Arg Lys Ala
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Leu Ala Glu Gln Ser Glu Ile Ile Gln Ala Gln Leu Val Asn Arg Lys
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Gln Lys Leu Glu Ser Val Glu Leu Ser Ser Gln Ser Glu Ile Gln His
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Leu Ser Ser Lys Leu Glu Arg Ala Asn Asp Thr Ile Cys Ala Asn Glu
    210                 215                 220
Leu Glu Ile Glu Arg Leu Thr Met Arg Val Asn Asp Leu Val Gly Thr
225                 230                 235                 240
Ser Met Thr Val Leu Gln Glu Gln Gln Gln Lys Glu Glu Lys Leu Arg
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Glu Ser Glu Lys Leu Leu Glu Ala Leu Gln Glu Glu Lys Arg Glu Leu
            260                 265                 270
Lys Ala Ala Leu Gln Ser Gln Glu Asn Leu Ile His Glu Ala Arg Ile
        275                 280                 285
Gln Lys Glu Lys Leu Gln Glu Lys Val Lys Ala Thr Asn Thr Gln His
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Ala Val Glu Ala Ile Ser Leu Glu Ser Val Ser Ala Thr Cys Arg Gln
305                 310                 315                 320
Leu Ser Gln Glu Leu Met Glu Lys Tyr Glu Glu Leu Lys Arg Met Glu
                325                 330                 335
Ala His Asn Asn Glu Tyr Lys Ala Glu Ile Lys Lys Leu Lys Glu Gln
            340                 345                 350
Ile Leu Gln Gly Glu Gln Ser Tyr Ser Ser Ala Leu Glu Gly Met Lys
        355                 360                 365
Met Glu Ile Ser His Leu Thr Gln Glu Leu His Gln Arg Asp Ile Thr
    370                 375                 380
Ile Ala Ser Thr Lys Gly Ser Ser Ser Asp Thr Glu Lys Arg Leu Arg
385                 390                 395                 400
Ala Glu Met Gln Lys Ala Glu Asp Lys Ala Val Glu His Lys Glu Ile
                405                 410                 415
Leu Asp Gln Leu Glu Ser Leu Lys Leu Glu Asn Arg His Leu Ser Glu
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            420                 425                 430
Met Val Met Lys Leu Glu Leu Gly Leu His Glu Arg Trp Gly Phe Thr
        435                 440                 445
Met Leu Ser Ser Leu Val Leu Asn Phe Gly Ile Gln Ala Ile Arg Gln
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Pro Gln Arg Pro Lys Val Leu Glu Leu Gln Val
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<210> 18078
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<212> DNA
<213> Homo sapiens

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<222> (68)..(2329)

<400> 18078

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0088205-0502460

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0060245-0060800

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<211> 754
<212> PRT
<213> Homo sapiens

<400> 18079

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			20					25					30		
Leu	Pro	Pro	Gly	Asp	Phe	Gln	Asn	Lys	Ile	Met	Arg	Tyr	Phe	Val	Arg
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Glu	Ile	Leu	Ala	Arg	Gly	Ile	Leu	Leu	Pro	Leu	Ile	Asn	Gln	Leu	Ser
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Asp	Pro	Asp	Tyr	Ile	Asn	Gln	Tyr	Val	Ile	Trp	Met	Ile	Arg	Asp	Ser
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Asn	Cys	Asn	Tyr	Glu	Ala	Phe	Met	Asn	Ile	Ile	Lys	Leu	Ser	Asp	Asn
				85					90					95	
Ile	Gly	Glu	Leu	Glu	Ala	Val	Arg	Asp	Lys	Ala	Ala	Glu	Glu	Leu	Gln
			100					105					110		
Tyr	Leu	Arg	Ser	Leu	Asp	Thr	Ala	Gly	Asp	Asp	Ile	Asn	Thr	Ile	Lys
		115					120					125			
Asn	Gln	Ile	Asn	Ser	Leu	Leu	Phe	Val	Lys	Lys	Val	Cys	Asp	Ser	Arg
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Ile	Gln	Arg	Leu	Gln	Ser	Gly	Lys	Glu	Ile	Asn	Thr	Val	Lys	Leu	Ala

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Gly Gln Ala His Leu Phe Phe Trp Met Thr Val Glu Gly Tyr Arg Val
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Thr Ala Gln Gln Gln Leu Glu Val Leu Leu Ser Arg Gln Arg Asp Gly
    210                 215                 220
Lys His Gln Thr Asn Gln Thr Lys Gly Leu Leu Arg Ala Ala Ala Val
225                 230                 235                 240
Gly Ile Tyr Glu Gln Tyr Leu Ser Glu Lys Ala Ser Pro Arg Val Thr
                245                 250                 255
Val Asp Asp Tyr Leu Val Ala Lys Leu Ala Asp Thr Leu Asn His Glu
            260                 265                 270
Asp Pro Thr Pro Glu Ile Phe Asp Asp Ile Gln Arg Lys Val Tyr Glu
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Leu Met Leu Arg Asp Glu Arg Phe Tyr Pro Ser Phe Arg Gln Asn Ala
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Phe Arg Gly Ser Asp Asp Gly Asp Gly Glu Ser Phe Asn Gly Ser Pro
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Thr Gly Ser Ile Asn Leu Ser Leu Asp Asp Leu Ser Asn Val Ser Ser
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Asp Asp Ser Val Gln Leu His Ala Tyr Ile Ser Asp Thr Gly Val Cys
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Asn Asp His Gly Lys Thr Tyr Ala Leu Tyr Ala Ile Thr Val His Arg
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Arg Asn Leu Asn Ser Glu Glu Met Trp Lys Thr Tyr Arg Arg Tyr Ser
385                 390                 395                 400
Asp Phe His Asp Phe His Met Arg Ile Thr Glu Gln Phe Glu Ser Leu
                405                 410                 415
Ser Ser Ile Leu Lys Leu Pro Gly Lys Lys Thr Phe Asn Asn Met Asp
            420                 425                 430
Arg Asp Phe Leu Glu Lys Arg Lys Lys Asp Leu Asn Ala Tyr Leu Gln
        435                 440                 445
Leu Leu Leu Ala Pro Glu Met Met Lys Ala Ser Pro Ala Leu Ala His
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Tyr Val Tyr Asp Phe Leu Glu Asn Lys Ala Tyr Ser Lys Gly Lys Gly
465                 470                 475                 480
Asp Phe Ala Arg Lys Met Asp Thr Phe Val Asn Pro Leu Arg Asn Ser
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Met Arg Asn Val Ser Asn Ala Val Lys Ser Leu Pro Asp Ser Leu Ala
            500                 505                 510
Glu Gly Met Thr Lys Met Ser Asp Asn Met Gly Lys Met Ser Glu Arg
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Leu Gly Gln Asp Ile Lys Gln Ser Phe Phe Lys Val Pro Pro Leu Ile
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0056450.0002800

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Pro Lys Thr Asp Ser Asp Pro Glu His Arg Arg Val Ser Ala Gln Leu
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Asp Asp Asn Val Asp Asp Asn Ile Pro Leu Arg Val Met Leu Leu Leu
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Met Asp Glu Val Phe Asp Leu Lys Glu Arg Asn Gln Trp Leu Arg Arg
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Asn Ile Lys Asn Leu Leu Gln Gln Leu Ile Arg Ala Thr Tyr Gly Asp
        595                 600                 605
Thr Ile Asn Arg Lys Ile Val Asp His Val Asp Trp Met Thr Ser Pro
    610                 615                 620
Glu Gln Val Ala Asp Ser Val Lys Arg Phe Arg Asp Ala Phe Trp Pro
625                 630                 635                 640
Asn Gly Ile Leu Ala Glu Ala Val Pro Cys Arg Asp Lys Ser Ile Arg
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Met Arg Thr Arg Val Ala Gly Lys Thr Lys Leu Leu Ala Ile Met Pro
            660                 665                 670
Asp Glu Leu Lys His Ile Ile Gly Ala Glu Thr Thr Arg Lys Gly Ile
        675                 680                 685
Leu Arg Val Phe Glu Met Phe Gln His Asn Gln Leu Asn Arg Arg Met
    690                 695                 700
Val Tyr Val Phe Leu Glu Gly Phe Leu Glu Thr Leu Phe Pro Gln Tyr
705                 710                 715                 720
Lys Phe Arg Glu Leu Phe Asn Lys Leu His Ser Arg Ser Lys Gln Met
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Gln Lys Tyr Lys Gln Lys Leu Gln Thr Thr Gln Ala Pro Ser Leu Gln
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<212> DNA
<213> Homo sapiens

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<222> (231)..(1796)

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<212> PRT

0050050.0003800

<213> Homo sapiens

<400> 18081

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Ser Thr Ala Gly Arg Leu Tyr Pro Arg Gly Tyr Pro Val Leu Asp Pro
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Ser Arg Arg Arg Leu Gln Gln Tyr Val Pro Phe Ala Arg Gly Ser Gly
    50                  55                  60
Gln Ala Arg Gly Leu Ser Pro Met Arg Leu Arg Asp Pro Glu Pro Glu
65                  70                  75                  80
Lys Arg His Gly Gly His Val Gly Ala Gly Leu Leu His Ser Pro Lys
                85                  90                  95
Leu Lys Glu Leu Thr Lys Ala His Glu Leu Glu Val Arg Leu His Thr
            100                 105                 110
Phe Ser Met Phe Gly Met Pro Arg Leu Pro Pro Glu Asp Arg Arg His
        115                 120                 125
Trp Glu Ile Gly Glu Gly Gly Asp Ser Gly Leu Thr Ile Glu Lys Ser
    130                 135                 140
Trp Arg Glu Leu Val Pro Gly His Lys Glu Met Ser Gln Glu Leu Cys
145                 150                 155                 160
His Gln Gln Glu Ala Leu Trp Glu Leu Leu Thr Thr Glu Leu Ile Tyr
                165                 170                 175
Val Arg Lys Leu Lys Ile Met Thr Asp Leu Leu Ala Ala Gly Leu Leu
            180                 185                 190
Asn Leu Gln Arg Val Gly Leu Leu Met Glu Val Ser Ala Glu Thr Leu
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Phe Gly Asn Val Pro Ser Leu Ile Arg Thr His Arg Ser Phe Trp Asp
    210                 215                 220
Glu Val Leu Gly Pro Thr Leu Glu Glu Thr Arg Ala Ser Gly Gln Pro
225                 230                 235                 240
Leu Asp Pro Ile Gly Leu Gln Ser Gly Phe Leu Thr Phe Gly Gln Arg
                245                 250                 255
Phe His Pro Tyr Val Gln Tyr Cys Leu Arg Val Lys Gln Thr Met Ala
            260                 265                 270
Tyr Ala Arg Glu Gln Gln Glu Thr Asn Pro Leu Phe His Ala Phe Val
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Gln Trp Cys Glu Lys His Lys Arg Ser Gly Arg Gln Met Leu Cys Asp
    290                 295                 300
Leu Leu Ile Lys Pro His Gln Arg Ile Thr Lys Tyr Pro Leu Leu Leu
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His Ala Val Leu Lys Arg Ser Pro Glu Ala Arg Ala Gln Glu Ala Leu
                325                 330                 335
Asn Ala Met Ile Glu Ala Val Glu Ser Phe Leu Arg His Ile Asn Gly
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Gln Val Arg Gln Gly Glu Glu Gln Glu Ser Leu Ala Ala Ala Ala Gln
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0552460-070800

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Lys Asn Leu Arg Pro Phe Ser Thr Leu Asp Leu Thr Ser Pro Met Leu
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Gly Val Ala Ser Glu His Thr Arg Gln Leu Leu Leu Glu Gly Pro Val
                405                 410                 415
Arg Val Lys Glu Gly Arg Glu Gly Lys Leu Asp Val Tyr Leu Phe Leu
            420                 425                 430
Phe Ser Asp Val Leu Leu Val Thr Lys Pro Gln Arg Lys Ala Asp Lys
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Ala Lys Val Ile Arg Pro Pro Leu Met Leu Glu Lys Leu Val Cys Gln
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Pro Leu Arg Asp Pro Asn Ser Phe Leu Leu Ile His Leu Thr Glu Phe
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Gln Cys Val Ser Ser Ala Leu Leu Val His Cys Pro Ser Pro Thr Asp
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<213> Homo sapiens

<400> 18083

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Val Glu Leu Ala Gln Asp Leu Leu Ala Asn Pro Pro Asp Leu Lys Val
         35                  40                  45
Glu Pro Pro Pro Ala Lys Gly Lys Lys Asn Lys Val Ser Thr Ser Arg
     50                  55                  60
Gln Thr Trp Val Ala Thr Asn Thr Leu Ser Lys Ala Ala Phe Leu Leu
 65                  70                  75                  80
Thr Val Leu Ser Glu Arg Pro Glu His His Asn Leu Ala Phe Arg Val
                 85                  90                  95
Gly Met Phe Ala Leu Glu Leu Gln Arg Pro Pro Ala Ser Thr Lys Ala
            100                 105                 110
Leu Glu Val Lys Leu Ala Tyr Gln Glu Ser Glu Val Ala Ala Leu Leu
        115                 120                 125
Lys Lys Ile Pro Leu Gly Pro Ser Glu Met Ser Thr Met Arg Cys Arg
    130                 135                 140
Ala Glu Glu Leu Arg Glu Gly Thr Leu Cys Asp Tyr Arg Pro Val Leu
145                 150                 155                 160
Pro Leu Met Leu Ala Ser Phe Ile Phe Asp Val Leu Cys Ala Pro Val
                165                 170                 175
Val Ser Pro Thr Gly Ser Arg Pro Pro Ser Arg Asn Trp Asn Ser Glu
            180                 185                 190
Thr Pro Gly Asp Glu Glu Leu Gly Phe Glu Ala Ala Val Ala Ala Leu
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Gly Met Lys Thr Thr Val Ser Glu Ala Glu His Pro Leu Leu Cys Glu
    210                 215                 220
Gly Thr Arg Arg Glu Lys Gly Asp Leu Ala Leu Ala Leu Met Ile Thr
225                 230                 235                 240
Tyr Lys Asp Asp Gln Ala Lys Leu Lys Lys Ile Leu Asp Lys Leu Leu
                245                 250                 255
Asp Arg Glu Ser Gln Thr His Lys Pro Gln Thr Leu Ser Ser Phe Tyr
            260                 265                 270
Ser Ser Ser Arg Pro Thr Thr Ala Ser Gln Arg Ser Pro Ser Lys His
        275                 280                 285
Gly Gly Pro Ser Ala Pro Gly Thr Leu Gln Pro Leu Thr Ser Gly Ser
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Ala Gly Pro Ala Gln Pro Gly Ser Val Ala Gly Ala Gly Pro Gly Pro
305                 310                 315                 320
Thr Glu Gly Phe Thr Glu Lys Asn Val Pro Glu Ser Ser Pro His Ser
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Gly Lys Val Pro Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn
355 360 365
Gly Arg Gly Trp Gly Ser Pro Gly Arg Pro Lys Met Lys His Thr Gly
370 375 380
Met Ala Ser Ile Asp Ser Ser Ala Pro Glu Thr Thr Ser Asp Ser Ser
385 390 395 400
Pro Thr Leu Ser Arg Arg Pro Leu Gln Gly Gly Trp Ala Pro Thr Ser
405 410 415
Trp Gly Arg Gly Gln Asp Ser Asp Ser Ile Ser Asn Ser Ser Ser Asp
420 425 430
Ser Leu Gly Ser Ser Ser Ser Ser Gly Ser Arg Arg Ala Ser Ala Ser
435 440 445
Gly Gly Ala Arg Ala Lys Thr Val Glu Val Gly Arg Tyr Lys Gly Arg
450 455 460
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Gly Gly Asn Ser Ser Thr Ser Ile Phe Thr His Pro Ser Ser Ser Gly
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Gly Leu Tyr Ala Leu Gly Leu His Asn Phe Val Ser Pro Asn Trp Leu
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Ser Arg Thr Tyr Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met
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565 570 575
His Leu Thr Pro Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg
580 585 590
Ala Arg Asp Ser Asn Met Val Arg Ala Ala Ala Glu Leu Ala Leu Ser
595 600 605
Cys Leu Pro His Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala
610 615 620
Leu Val Gln Cys Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys
625 630 635 640
Met Ala Val Glu Val Ala Ala Lys Gly Gly Gly Val Tyr Pro Glu Val
645 650 655
Leu Phe Glu Val Ala His Gln Trp Phe Trp Leu Tyr Glu Gln Thr Ala
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Gly Ile Arg Ala Gly Gly Glu Ala Gly Arg Gly Met Pro Glu Gly Arg
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Pro Ala His Pro Ala His Pro Met Pro His Met Pro Arg Pro Ala Val
    770                 775                 780
Phe Pro Val Pro Ser Ser Ala Tyr Pro Gln Gly Val His Pro Ala Phe
785                 790                 795                 800
Leu Gly Ala Gln Tyr Pro Tyr Ser Val Thr Pro Pro Ser Leu Ala Ala
                805                 810                 815
Thr Ala Val Ser Phe Pro Val Pro Ser Met Ala Pro Ile Thr Val His
            820                 825                 830
Pro Tyr His Thr Glu Pro Gly Leu Pro Leu Pro Thr Ser Val Ala Cys
        835                 840                 845
Glu Leu Trp Gly Gln Gly Thr Val Ser Ser Val His Pro Ala Ser Thr
    850                 855                 860
Phe Pro Ala Ile Gln Gly Ala Ser Leu Pro Ala Leu Thr Thr Gln Pro
865                 870                 875                 880
Ser Pro Leu Val Ser Gly Gly Phe Pro Pro Pro Glu Glu Glu Thr His
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Ser Gln Pro Val Asn Pro His Ser Leu His His Leu His Ala Ala Tyr
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Arg Val Gly Met Leu Ala Leu Glu Met Leu Gly Arg Arg Ala His Asn
        915                 920                 925
Asp His Pro Asn Asn Phe Ser Arg Ser Pro Pro Tyr Thr Asp Asp Val
    930                 935                 940
Lys Trp Leu Leu Gly Leu Ala Ala Lys Leu Gly Val Asn Tyr Val His
945                 950                 955                 960
Gln Phe Cys Val Gly Ala Ala Lys Gly Val Leu Ser Pro Phe Val Leu
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Gln Glu Ile Val Met Glu Thr Leu Gln Arg Leu Ser Pro Ala His Ala
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His Asn His Leu Arg Ala Pro Ala Phe His Gln Leu Val Gln Arg Cys
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Gln Gln Ala Tyr Met Gln Tyr Ile His His Ser Leu Ile His Leu Thr
   1010                1015                1020
Pro Ala Asp Tyr Asp Asp Phe Val Asn Ala Ile Arg Ser Ala Arg Ser
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Ala Phe Cys Leu Thr Pro Met Gly Met Met Gln Phe Asn Asp Ile Leu
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<212> DNA
<213> Homo sapiens

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<222> (40)..(2415)

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ct 4262

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<212> PRT
<213> Homo sapiens

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35 40 45

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His Leu Leu Pro Asp Gly Thr Leu Leu Leu Leu Gln Pro Pro Ala Arg
                 85                  90                  95
Gly His Ala His Asp Gly Gln Ala Leu Ser Thr Asp Leu Gly Val Tyr
            100                 105                 110
Thr Cys Glu Ala Ser Asn Arg Leu Gly Thr Ala Val Ser Arg Gly Ala
        115                 120                 125
Arg Leu Ser Val Ala Val Leu Arg Glu Asp Phe Gln Ile Gln Pro Arg
    130                 135                 140
Asp Met Val Ala Val Val Gly Glu Gln Phe Thr Leu Glu Cys Gly Pro
145                 150                 155                 160
Pro Trp Gly His Pro Glu Pro Thr Val Ser Trp Trp Lys Asp Glu Lys
                165                 170                 175
Pro Leu Ala Leu Gln Pro Gly Arg His Thr Val Ser Gly Gly Ser Leu
            180                 185                 190
Leu Met Ala Arg Ala Glu Lys Ser Asp Glu Gly Thr Tyr Met Cys Val
        195                 200                 205
Ala Thr Asn Ser Ala Gly His Arg Glu Ser Arg Ala Ala Arg Val Ser
    210                 215                 220
Ile Gln Glu Pro Gln Asp Tyr Thr Glu Pro Val Glu Leu Leu Ala Val
225                 230                 235                 240
Arg Ile Gln Leu Glu Asn Val Thr Leu Leu Asn Pro Asp Pro Ala Glu
                245                 250                 255
Gly Pro Lys Pro Arg Pro Ala Val Trp Leu Ser Trp Lys Val Ser Gly
            260                 265                 270
Pro Ala Ala Pro Ala Gln Ser Tyr Thr Ala Leu Phe Arg Thr Gln Thr
        275                 280                 285
Ala Pro Gly Gly Gln Gly Ala Pro Trp Ala Glu Glu Leu Leu Ala Gly
    290                 295                 300
Trp Gln Ser Ala Glu Leu Gly Gly Leu His Trp Gly Gln Asp Tyr Glu
305                 310                 315                 320
Phe Lys Val Arg Pro Ser Ser Gly Arg Ala Arg Gly Pro Asp Ser Asn
                325                 330                 335
Val Leu Leu Leu Arg Leu Pro Glu Lys Val Pro Ser Ala Pro Pro Gln
            340                 345                 350
Glu Val Thr Leu Lys Pro Gly Asn Gly Thr Val Phe Val Ser Trp Val
        355                 360                 365
Pro Pro Pro Ala Glu Asn His Asn Gly Ile Ile Arg Gly Tyr Gln Val
    370                 375                 380
Trp Ser Leu Gly Asn Thr Ser Leu Pro Pro Ala Asn Trp Thr Val Val
385                 390                 395                 400
Gly Glu Gln Thr Gln Leu Glu Ile Ala Thr His Met Pro Gly Ser Tyr
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Cys Val Gln Val Ala Ala Val Thr Gly Ala Gly Ala Gly Glu Pro Ser
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Leu Lys Arg Pro Glu Val Ile Ala Thr Cys Gly Val Ala Leu Trp Leu
465                 470                 475                 480
Leu Leu Leu Gly Thr Ala Val Cys Ile His Arg Arg Arg Arg Ala Arg
                485                 490                 495
Val His Leu Gly Pro Gly Leu Tyr Arg Tyr Thr Ser Glu Asp Ala Ile
            500                 505                 510
Leu Lys His Arg Met Asp His Ser Asp Ser Gln Trp Leu Ala Asp Thr
        515                 520                 525
Trp Arg Ser Thr Ser Gly Ser Arg Asp Leu Ser Ser Ser Ser Ser Leu
    530                 535                 540
Ser Ser Arg Leu Gly Ala Asp Ala Arg Asp Pro Leu Asp Cys Arg Arg
545                 550                 555                 560
Ser Leu Leu Ser Trp Asp Ser Arg Ser Pro Gly Val Pro Leu Leu Pro
                565                 570                 575
Asp Thr Ser Thr Phe Tyr Gly Ser Leu Ile Ala Glu Leu Pro Ser Ser
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Thr Pro Ala Arg Pro Ser Pro Gln Val Pro Ala Val Arg Arg Leu Pro
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Pro Gln Leu Ala Gln Leu Ser Ser Pro Cys Ser Ser Ser Asp Ser Leu
    610                 615                 620
Cys Ser Arg Arg Gly Leu Ser Ser Pro Arg Leu Ser Leu Ala Pro Ala
625                 630                 635                 640
Glu Ala Trp Lys Ala Lys Lys Lys Gln Glu Leu Pro His Ala Asn Ser
                645                 650                 655
Ser Pro Leu Leu Arg Gly Ser His Ser Leu Glu Leu Arg Ala Cys Glu
            660                 665                 670
Leu Gly Asn Arg Gly Ser Lys Asn Leu Ser Gln Ser Pro Gly Ala Val
        675                 680                 685
Pro Gln Ala Leu Val Ala Trp Arg Ala Leu Gly Pro Lys Leu Leu Ser
    690                 695                 700
Ser Gln Met Ser Trp Leu Leu Val Ile Ser Leu Gln His Pro Ser Phe
705                 710                 715                 720
Leu Met Lys Leu Pro Gln Leu Arg Val Asn Arg Pro Ser Leu Arg Trp
                725                 730                 735
His His Arg Leu Pro Pro Pro Ser Cys Cys Gln Gln Pro Pro Ser Pro
            740                 745                 750
Ser Leu Ala Pro Ala Val Pro Leu Ala Pro Arg Pro Leu Pro Ser Leu
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Ala Pro Ala Gln Leu Pro Val Ala Cys Pro Ala Pro His Cys His Pro
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<210> 18086
<211> 3580
<212> DNA
<213> Homo sapiens

<220>
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<222> (806)..(1966)

<400> 18086
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<212> PRT
<213> Homo sapiens

<400> 18087
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Glu Thr His Lys Val Ala Ala Pro Asp Val Val Val Pro Thr Leu Tyr
50 55 60
Thr Val Arg His Glu Ala Leu Leu Tyr Thr Trp Leu Ala Glu His Lys
65 70 75 80
Pro Leu Val Leu Cys Gly Pro Pro Gly Ser Gly Lys Thr Met Thr Leu
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Phe Ser Ala Leu Arg Ala Leu Pro Asp Met Glu Val Val Gly Leu Asn
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Phe Ser Ser Ala Thr Thr Pro Glu Leu Leu Leu Lys Thr Phe Asp His
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Met Val Glu His Gly Gly Phe Tyr Arg Thr Ser Asp Gln Thr Trp Val
            180                 185                 190
Lys Leu Glu Arg Ile Gln Phe Val Gly Ala Cys Asn Pro Pro Thr Asp
        195                 200                 205
Pro Gly Arg Lys Pro Leu Ser His Arg Phe Leu Arg His Val Pro Val
    210                 215                 220
Val Tyr Val Asp Tyr Pro Gly Pro Ala Ser Leu Thr Gln Ile Tyr Gly
225                 230                 235                 240
Thr Phe Asn Arg Ala Met Leu Arg Leu Ile Pro Ser Leu Arg Thr Tyr
                245                 250                 255
Ala Glu Pro Leu Thr Ala Ala Met Val Glu Phe Tyr Thr Met Ser Gln
            260                 265                 270
Glu Arg Phe Thr Gln Asp Thr Gln Pro His Tyr Ile Tyr Ser Pro Arg
        275                 280                 285
Glu Met Thr Arg Trp Val Arg Gly Ile Phe Glu Ala Leu Arg Pro Leu
    290                 295                 300
Glu Thr Leu Pro Val Glu Gly Leu Ile Arg Ile Trp Ala His Glu Ala
305                 310                 315                 320
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<212> DNA
<213> Homo sapiens

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<211> 875
<212> PRT
<213> Homo sapiens

<400> 18089

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         35                  40                  45
Gly Gly Val Gly Ser Ala Asn Ser Ser Ala Asp Ser Thr Ile Ser Val
     50                  55                  60
Ile Ser Gly Ser Leu Ser His Ser Glu Pro Ser His Gly Leu Ala Asp
 65                  70                  75                  80
Arg Val Ile Asn Cys Arg Glu Val Leu Glu Ala Phe Asn Leu Leu Val
                 85                  90                  95
Leu Gln Val Ser Ser Phe Pro Tyr Thr Leu Gln Thr Gln Gln Ser Arg
            100                 105                 110
Ile Ser Ser Ser Asn Glu Val His Trp Ile Gln Leu Asp Thr Gly Glu
        115                 120                 125
Asp Val Gly Cys Glu Glu Lys Leu Tyr Phe Gly Leu Ser Glu Tyr Ser
    130                 135                 140
Lys Ser Leu Gln Trp Gly Ile Thr Ser Pro Leu Leu Arg Cys Asp Glu
145                 150                 155                 160
Thr Phe Glu Lys Met Val Asn Thr Leu Leu Glu Arg Tyr Pro Arg Leu
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His Ser Met Val Val Arg Cys Tyr Leu Leu Ile Gln Gln Tyr Ser Glu
            180                 185                 190
Ala Leu Met Ala Leu Thr Thr Met Ala Ser Leu Arg Asp His Ser Thr
        195                 200                 205
Pro Glu Thr Leu Ser Ile Met Asp Asp Leu Ile Ser Ser Pro Gly Lys
    210                 215                 220
Asn Lys Ser Gly Arg Gly His Met Leu Ile Ile Arg Val Pro Ser Val
225                 230                 235                 240
Gln Leu Ala Met Leu Ala Lys Glu Arg Leu Gln Glu Val Arg Asp Lys
                245                 250                 255
Leu Gly Leu Gln Tyr Arg Phe Glu Ile Ile Leu Gly Asn Pro Ala Thr
            260                 265                 270
Glu Leu Ser Val Ala Thr His Phe Val Ala Arg Leu Lys Ser Trp Arg
        275                 280                 285
Gly Asn Glu Pro Glu Glu Trp Ile Pro Arg Thr Tyr Gln Asp Leu Asp
    290                 295                 300
Gly Leu Pro Cys Ile Val Ile Leu Thr Gly Lys Asp Pro Leu Gly Glu
305                 310                 315                 320
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Asp Glu Leu Leu Ile Asp Leu Glu Arg Pro Gln Ser Asn Ser Ser Ala
385                 390                 395                 400
Val Thr Gly Thr Ser Gly Ser Ile Met Glu Asn Gly Val Ser Ser Ser
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Ser Pro Ala Thr Ser Leu Gly Leu Asp Glu Gly Val Ser Ala Ser Ser
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Ala Gly Ala Gly Ala Gly Glu Thr Leu Lys Gln Glu Cys Asp Ser Leu
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Arg Gly Pro Gln Ala Ala Leu Pro Pro Val Val Ile Leu Ser Lys Ala
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Ser Ser Leu Leu Pro His Ala Asp Val Ala Trp Val Ser Ser Leu Arg
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Pro Leu Leu Asn Lys Asp Met Ser Ser Glu Glu Gln Ser Leu Tyr Tyr
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Arg Gln Trp Thr Leu Ala Arg Gln His His Ala Asp Tyr Ser Asn Gln
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Leu Thr Gly Pro Pro Gln Val Gly Lys Thr Gly Ser Tyr Leu Gln Phe
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Leu Arg Ile Leu Phe Arg Met Leu Ile Arg Leu Leu Glu Val Asp Val
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Tyr Asp Glu Glu Glu Ile Asn Thr Asp His Asn Glu Ser Ser Glu Val
625                 630                 635                 640
Ser Gln Ser Glu Gly Glu Pro Trp Pro Asp Ile Glu Ser Phe Ser Lys
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Met Pro Phe Asp Val Ser Val His Asp Pro Lys Tyr Ser Leu Met Ser
            660                 665                 670
Leu Val Tyr Thr Glu Lys Leu Ala Gly Val Lys Gln Glu Val Ile Lys
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Glu Ser Lys Val Glu Glu Pro Arg Lys Arg Glu Thr Val Ser Ile Met
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Leu Thr Lys Tyr Ala Ala Tyr Asn Thr Phe His His Cys Glu Gln Cys
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Arg Gln Tyr Met Asp Phe Thr Ser Ala Ser Gln Met Ser Asp Ser Thr
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        755                 760                 765
Lys Gln Gly Lys His Leu Glu Ser Met Arg Leu Pro Leu Val Ser Asp
    770                 775                 780
Lys Asn Leu Asn Ala Val Lys Ser Pro Ile Phe Thr Pro Ser Ser Gly
785                 790                 795                 800
Arg His Glu His Gly Leu Leu Asn Leu Phe His Ala Met Glu Gly Ile
                805                 810                 815
Ser His Leu His Leu Leu Val Val Lys Glu Tyr Glu Met Pro Leu Tyr
            820                 825                 830
Arg Lys Tyr Trp Pro Asn His Ile Met Leu Val Leu Pro Gly Met Phe
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (167)..(2110)

<400> 18090

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US 2005/0059800 A1

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35 40 45
Leu Lys Gln Thr Tyr Lys Gln Gln Gly Ser Thr Val Leu Lys Leu Gly
50 55 60
Asp Thr Val Ile Pro Tyr His Glu Asp Phe Arg Met Tyr Ile Thr Thr
65 70 75 80
Lys Leu Pro Asn Pro His Tyr Thr Pro Glu Ile Ser Thr Lys Leu Thr

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Gln Leu Ile Ile Ser Asn Ala Lys Met Arg Gln Glu Leu Lys Asp Ile
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Glu Asp Gln Ile Leu Tyr Arg Leu Ser Ser Ser Glu Gly Asn Pro Val
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Asp Asp Met Glu Leu Ile Lys Val Leu Glu Ala Ser Lys Met Lys Ala
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Ala Glu Ile Gln Ala Lys Val Arg Ile Ala Glu Gln Thr Glu Lys Asp
            180                 185                 190
Ile Asp Leu Thr Arg Met Glu Tyr Ile Pro Val Ala Ile Arg Thr Gln
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Ile Leu Phe Phe Cys Val Ser Asp Leu Ala Asn Val Asp Pro Met Tyr
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Gln Tyr Ser Leu Glu Trp Phe Leu Asn Ile Phe Leu Ser Gly Ile Val
225                 230                 235                 240
Asn Ser Val Arg Ala Asp Asn Leu Lys Lys Arg Ile Ser Asn Ile Asn
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Arg Tyr Leu Thr Tyr Ser Leu Tyr Ser Asn Val Cys Arg Ser Leu Phe
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Glu Lys His Lys Leu Met Phe Ala Phe Leu Leu Cys Val Arg Ile Met
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Gly Gly Ser Ile Ser Ile Met Thr Glu Asn Pro Ala Pro Asp Trp Leu
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Ser Asp Arg Ala Trp Arg Asp Ile Leu Ala Leu Ser Asn Leu Pro Thr
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Phe Ser Ser Phe Ser Ser Asp Phe Val Lys His Leu Ser Glu Phe Arg
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Val Ile Phe Asp Ser Leu Glu Pro His Arg Glu Leu Leu Pro Gly Ile
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Trp Asp Gln Tyr Leu Asp Gln Phe Gln Lys Leu Leu Val Leu Arg Cys
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Val Phe Lys Asp Ser Asn Ser Thr Thr Pro Leu Ile Phe Val Leu Ser
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Pro Gly Thr Asp Pro Ala Ala Asp Leu Tyr Lys Phe Ala Glu Glu Met
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Gly Thr Ile Ile Gln Leu Gln Pro Lys Ser Ser Ser Ala Gly Ser Gln
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Gly Arg Glu Glu Ile Val Glu Asp Val Thr Gln Asn Ile Leu Leu Lys
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Lys Ala Leu Lys Gly Leu Val Val Met Ser Ser Gln Leu Glu Leu Met
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<400> 18107

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0062946.0028

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<213> Homo sapiens

<400> 18108

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Cys	Ser	Cys	Gly	Asp	Ser	Ser	Ser	Arg	Arg	Arg	Arg	Ser	Cys	Cys	Thr
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<400> 18109

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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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Asp Ser Asn Val Glu Gly Arg Gly Arg Ala Glu Leu Gln Ala Phe Arg
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<212> PRT
<213> Homo sapiens

<400> 18113
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Tyr Met Phe Gly Ser Ser Gln Ser Leu Leu His Ser Ser Asn Ser Ser
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Ser Ser Ser Tyr Arg Gly Ser Phe Gly Leu Ala Leu Lys Val Gln Glu
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Arg Lys Val Phe Phe Arg Arg His Tyr Pro Leu Thr Thr Leu Arg Phe
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Ser Trp Ile Phe Gly Phe Val Ala Lys Ser Gln Thr Glu Pro Gln Glu
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<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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    50                  55                  60
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65                  70                  75                  80
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<212> DNA
<213> Homo sapiens

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Ser Leu Pro Thr Thr Asp Asp Glu Asp Ser Gln His Gln Cys Thr Gly
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Pro Lys Pro Arg Gln Arg Pro Thr Leu Pro Pro Pro Gln Pro Pro Thr
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Ala Ser Val Lys Ala Cys Ile Ala Asn Val Glu Pro Asn Gln Thr Val
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Lys Tyr Leu Gln Thr Asn Ile Gln His Phe Leu Phe Ser Leu Cys Glu
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<213> Homo sapiens

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<222> (1945)..(3108)

<400> 18137

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<400> 18138

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Phe	Asp	Phe	Glu	Gly	Ser	Leu	Ser	Pro	Val	Ile	Ala	Pro	Lys	Lys	Ala
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Thr Leu Met Gly Glu Gly Ile Cys Ser Leu Val Glu Leu Leu Val Gln
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Leu Ala Arg Asp Leu Lys Leu Gly Pro Tyr Val Asp His Tyr Tyr Arg
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Asp Tyr Pro Thr Leu Val Arg Thr Thr Gly Gln Val Cys Thr Ile Asp
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Pro Gly Gln Thr Gly Phe Met His His Pro Ser Phe Phe Thr Ser Glu
305 310 315 320
Pro Pro Ser Ile Tyr Gln Trp Val Ser Ser Cys Leu Lys Gly Glu Gly
325 330 335
Met Pro Pro Tyr Pro Tyr Leu Pro Gly Ile Cys Glu Arg Ser Arg Leu
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Val Val Leu Ser Ile Ala Leu Tyr Ile Leu Gly Asp Glu Ser Leu Val
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Ser Asp Glu Ser Ser Gln Tyr Leu Thr Arg Ile Thr Ile Ala Pro Gln
370 375 380
Lys Leu Gln Val Glu Gln Glu Glu Asn Arg Phe Ser Phe Arg His Ser
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Glu Lys Glu Asn Arg Leu Leu Gln Leu Cys Gln Arg Thr Met Ala Leu
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Pro Val Gly Arg Gly Met Phe Thr Leu Phe Ser Tyr His Pro Val Pro
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Thr Glu Pro Leu Pro Ile Pro Lys Leu Asn Leu Thr Gly Arg Ala Pro
580 585 590

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Met Ala Leu Gly Leu Asn Gly His Leu Thr Lys Leu Ala Thr Leu Asn
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Ile His Asp Tyr Leu Thr Lys Gly His Glu Met Thr Ser Ile Gly Leu
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Leu Leu Gly Val Ser Ala Ala Lys Leu Gly Thr Met Asp Met Ser Ile
690 695 700
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Ile Gly Leu Val Tyr Gln Gly Thr Ala His Arg His Thr Ala Glu Val
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Leu Leu Ala Glu Ile Gly Arg Pro Pro Gly Pro Glu Met Glu Tyr Cys
755 760 765
Thr Asp Arg Glu Ser Tyr Ser Leu Ala Ala Gly Leu Ala Leu Gly Met
770 775 780
Val Cys Leu Gly His Gly Ser Asn Leu Ile Gly Met Ser Asp Leu Asn
785 790 795 800
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Pro Ala His Ser Thr Asp Asn Arg Tyr His Leu Gln Ala Leu Arg His
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Gly Arg Arg Glu Met Ser Glu Thr Ser Glu Leu Trp Gln Ile Lys Leu
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His Pro Lys Arg Gly Leu Phe Met Asn Ser Glu Phe Leu Pro Val Val
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Ile Glu Gly Ser Gln Glu Tyr Asn Glu Gly Leu Val Lys Arg Leu His
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Lys Val Leu Arg Pro Phe Leu Leu Arg Arg Val Lys Val Asp Val Glu
     50                  55                  60
Lys Gln Met Pro Lys Lys Tyr Glu His Val Ile Arg Cys Arg Leu Ser
 65                  70                  75                  80
Lys Arg Gln Arg Cys Leu Tyr Asp Asp Phe Met Ala Gln Thr Thr Thr
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Lys Glu Thr Leu Ala Thr Gly His Phe Met Ser Val Ile Asn Ile Leu
            100                 105                 110
Met Gln Leu Arg Lys Val Cys Asn His Pro Asn Leu Phe Asp Pro Arg
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Pro Val Thr Ser Pro Phe Ile Thr Pro Gly Ile Cys Phe Ser Thr Ala
    130                 135                 140
Ser Leu Val Leu Arg Ala Thr Asp Val His Pro Leu Gln Arg Ile Asp
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Met Gly Arg Phe Asp Leu Ile Gly Leu Glu Gly Arg Val Ser Arg Tyr
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Glu Ala Asp Thr Phe Leu Pro Arg His Arg Leu Ser Arg Arg Val Leu
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Leu Glu Val Ala Thr Ala Pro Asp Pro Pro Pro Arg Pro Lys Pro Val
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Lys Met Lys Val Asn Arg Met Leu Gln Pro Val Pro Lys Gln Glu Gly
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Pro Val Arg Pro Pro Pro Gly Pro Glu Leu Ser Ala Gln Pro Thr Pro
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Pro Ser Pro Leu Gly Val Leu Ser Gly Thr Ser Arg Pro Pro Thr Pro
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Thr Leu Ser Leu Lys Pro Thr Pro Pro Ala Pro Val Arg Leu Ser Pro
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Ala Pro Pro Pro Gly Ser Ser Ser Leu Leu Lys Pro Leu Thr Val Pro
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Pro Gly Tyr Thr Phe Pro Pro Ala Ala Val Thr Thr Thr Ser Thr Thr
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Ala Ala Thr Ala Thr Thr Thr Ala Val Pro Pro Thr Pro Ala Pro Gln
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Arg Leu Ile Leu Ser Pro Asp Met Gln Ala Arg Leu Pro Ser Gly Glu
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Val Val Ser Ile Gly Gln Leu Ala Ser Leu Ala Gln Arg Pro Val Ala
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Asn Ala Gly Gly Ser Lys Pro Leu Thr Phe Gln Ile Gln Gly Asn Lys
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Leu Thr Leu Thr Gly Ala Gln Val Arg Gln Leu Ala Val Gly Gln Pro
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Arg Pro Leu Gln Arg Asn Val Val His Leu Val Ser Ala Gly Gly Gln
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His His Leu Ile Ser Gln Pro Ala His Val Ala Leu Ile Gln Ala Val
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Ala Pro Thr Pro Gly Pro Thr Pro Val Ser Val Leu Pro Ser Ser Thr
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Pro Ser Thr Thr Pro Ala Pro Thr Gly Leu Ser Leu Pro Leu Ala Ala
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Asn Gln Val Pro Pro Thr Met Val Asn Asn Thr Gly Val Val Lys Ile
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Val Val Arg Gln Ala Pro Arg Asp Gly Leu Thr Pro Val Pro Pro Leu
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Ala Pro Ala Pro Arg Pro Pro Ser Ser Gly Leu Pro Ala Val Leu Asn
545                 550                 555                 560
Pro Arg Pro Thr Leu Thr Pro Gly Arg Leu Pro Thr Pro Thr Leu Gly
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Thr Ala Arg Ala Pro Met Pro Thr Pro Thr Leu Val Arg Pro Leu Leu
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Lys Leu Val His Ser Pro Ser Pro Glu Val Ser Ala Ser Ala Pro Gly
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Leu Leu Thr Ser Val Thr Pro Pro Leu Ala Pro Val Val Pro Ala Ala
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Pro Gly Pro Pro Ser Leu Ala Pro Ser Gly Ala Ser Pro Ser Ala Ser
705                 710                 715                 720
Ala Leu Thr Leu Gly Leu Ala Thr Ala Pro Ser Leu Ser Ser Ser Gln
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Thr Pro Gly His Pro Leu Leu Leu Ala Pro Thr Ser Ser His Val Pro
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Gly Leu Asn Ser Thr Val Ala Pro Ala Cys Ser Pro Val Leu Val Pro
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Ala Ser Ala Leu Ala Ser Pro Phe Pro Ser Ala Pro Asn Pro Ala Pro
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Ala Thr Pro Leu Ala Pro Met Ala Ala Pro Gln Thr Ala Ile Leu Ala
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Pro Ser Pro Ala Pro Pro Leu Ala Pro Leu Pro Val Leu Ala Pro Ser
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Pro Gly Ala Ala Pro Val Leu Ala Ser Ser Gln Thr Pro Val Pro Val
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Met Ala Pro Ser Ser Thr Pro Gly Thr Ser Leu Ala Ser Ala Ser Pro
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Val Pro Ala Pro Thr Pro Val Leu Ala Pro Ser Ser Thr Gln Thr Met
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Leu Pro Ala Pro Val Pro Ser Pro Leu Pro Ser Pro Ala Ser Thr Gln
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Thr Leu Ala Leu Ala Pro Ala Leu Ala Pro Thr Leu Gly Gly Ser Ser
            900                 905                 910
Pro Ser Gln Thr Leu Ser Leu Gly Thr Gly Asn Pro Gln Gly Pro Phe
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Pro Thr Gln Thr Leu Ser Leu Thr Pro Ala Ser Ser Leu Val Pro Thr
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Pro Ala Gln Thr Leu Ser Leu Ala Pro Gly Pro Pro Leu Gly Pro Thr
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Gln Thr Leu Ser Leu Ala Pro Ala Pro Pro Leu Ala Pro Ala Ser Pro
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Val Gly Pro Ala Pro Ala His Thr Leu Thr Leu Ala Pro Ala Ser Ser
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35 40 45
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50 55 60
Lys Arg Glu Arg Glu Leu Thr Ala Leu Lys Gly Ala Leu Lys Glu Glu
65 70 75 80
Val Ser Ser His Asp Gln Glu Met Asp Lys Leu Lys Glu Gln Tyr Asp
85 90 95
Ala Glu Leu Gln Ala Leu Arg Glu Ser Val Glu Glu Ala Thr Lys Asn
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Ala Ser Arg Thr Ser Thr Leu Glu Leu Gln Asn Gln Leu Asp Glu Tyr
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35 40 45
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Glu Phe Leu Gly Lys Arg Glu Val Pro Cys Pro Pro Gly Thr Glu Gly
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Gln Gly Ala Gln Lys Trp Val Arg Asn Ile Ser Tyr Phe Arg Leu Asp
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Gly Ser Thr Pro Ala Phe Glu Arg Glu Arg Leu Ile Asn Arg Phe Asn
115 120 125
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<400> 18171

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Leu Val Ala Gln Ser Asn Thr Asn Ser Val Ile His Thr Leu Gly Arg
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<213> Homo sapiens

<400> 18181

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Val Glu Asn Glu Met Phe Phe Cys Gln His Cys Asp Tyr Gly Asn Arg
         35                  40                  45
Thr Val Lys Gly Val Leu Ile His Tyr Gln Lys Lys His Arg Asp Phe
     50                  55                  60
Lys Ala Asn Ala Asp Val Ile Arg Gln His Thr Ala Thr Ile Arg Ser
 65                  70                  75                  80
Leu Cys Asp Arg Asn Arg Lys Lys Pro Ala Ser Cys Val Leu Ile Ser
                 85                  90                  95
Pro Ser Asn Leu Glu Arg Asp Lys Thr Lys Leu Arg Ala Leu Lys Cys
            100                 105                 110
Arg Gln Cys Ser Tyr Thr Ser Pro Tyr Phe Tyr Ala Leu Arg Lys His
        115                 120                 125
Ile Lys Lys Asp His Pro Ala Leu Lys Ala Thr Val Thr Ser Ile Met
    130                 135                 140
Arg Trp Ala Phe Leu Asp Gly Leu Ile Glu Ala Gly Tyr His Cys Glu
145                 150                 155                 160
Trp Cys Ile Tyr Ser His Thr Glu Pro Asn Gly Leu Leu Leu His Tyr
                165                 170                 175
Arg Arg Arg His Pro Glu His Tyr Val Asp Tyr Thr Tyr Met Ala Thr
            180                 185                 190
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Ala Glu Ala Lys Thr Tyr Arg Cys Arg Asp Cys Val Phe Glu Ala Val
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Ser Ile Trp Asp Ile Thr Asn His Tyr Gln Ala Phe His Pro Trp Ala
225 230 235 240
Met Asn Gly Asp Glu Ser Val Leu Leu Asp Ile Ile Lys Glu Lys Asp
245 250 255
Ala Val Glu Lys Pro Ile Leu Ser Ser Glu Glu Leu Thr Gly Pro Val
260 265 270
Asn Cys Ala Asn Ser Ile Pro Thr Pro Phe Pro Glu Gln Glu Ala Glu
275 280 285
Cys Pro Glu Asp Ala Arg Leu Ser Pro Glu Lys Ser Leu Gln Leu Ala
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Ser Ala Asn Pro Ala Ile Ser Ser Thr Pro Tyr Gln Cys Thr Val Cys
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Gln Ser Glu Tyr Asn Asn Leu His Gly Leu Leu Thr His Tyr Gly Lys
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Lys His Pro Gly Met Lys Val Lys Ala Ala Asp Phe Ala Gln Asp Ile
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Asp Ile Asn Pro Gly Ala Val Tyr Lys Cys Arg His Cys Pro Tyr Ile
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Asn Thr Arg Ile His Gly Val Leu Thr His Tyr Gln Lys Arg His Pro
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Ser Ile Lys Val Thr Ala Glu Asp Phe Val His Asp Val Glu Gln Ser
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Ala Asp Ile Ser Gln Asn Asp Val Glu Glu Thr Ser Arg Ile Phe Lys
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Gln Gly Tyr Gly Ala Tyr Arg Cys Lys Leu Cys Pro Tyr Thr His Gly
420 425 430
Thr Leu Glu Lys Leu Lys Ile His Tyr Glu Lys Tyr His Asn Gln Pro
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Glu Phe Asp Val Phe Ser Gln Ser Pro Pro Lys Leu Pro Val Pro Leu
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Glu Pro Glu Met Thr Thr Glu Val Ser Pro Ser Gln Val Ser Ile Thr
465 470 475 480
Glu Glu Glu Val Gly Glu Glu Pro Val Ser Thr Ser His Phe Ser Thr
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Ser His Leu Val Ser His Thr Val Phe Arg Cys Gln Leu Cys Lys Tyr
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Phe Cys Ser Thr Arg Lys Gly Ile Ala Arg His Tyr Arg Ile Lys His
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Asn Asn Val Arg Ala Gln Pro Glu Gly Lys Asn Asn Leu Phe Lys Cys
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Ala Leu Cys Ala Tyr Thr Asn Pro Ile Arg Lys Gly Leu Ala Ala His
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Tyr Gln Lys Arg His Asp Ile Asp Ala Tyr Tyr Thr His Cys Leu Ala
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0960290-0960800

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Pro Pro Lys Asp Asp Ser Pro Gln Leu Ser Glu Glu Leu Arg Arg Ala
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Val Glu Lys Lys Lys Cys Ser Leu Cys Ser Phe Gln Ser Phe Ser Lys
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Ala Asp Glu His Glu Lys Pro Thr Leu Met Glu Glu Glu Glu Arg Gly
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Leu Pro Phe Arg Cys Ile Lys Cys Phe Lys Leu Ser Phe Ser Thr Ala
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Arg Asp Phe Ile Ile Leu Gly Asn Gly Pro Arg Leu Gln Asn Ser Thr
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Thr Ser His Leu Asn Ile His Asn Glu Glu Phe Gln Lys Arg Ala Lys
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850 855 860
Ala Lys Asp Ala Ser Gly Ala Leu Val Gly Arg Val Asp Gly Glu His
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Cys Leu Leu Asp Gly Met Leu Glu Asp Glu Thr Arg Pro Gly Gly Tyr
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His Cys Ser Gln Cys Asp Arg Val Leu Met Ser Met Gln Gly Leu Arg
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Ser His Glu Arg Ser His Leu Ala Leu Ala Met Phe Thr Arg Glu Asp
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Leu Asp Arg His Met Gln Thr His His Gly His His Lys Pro Phe Arg
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Cys Ser Phe Ser Thr Met Thr Ile Ser Gln Leu Lys Glu His Ser Leu
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Lys Val His Gly Lys Ala Leu Thr Leu Pro Arg Pro Arg Ile Val Ser
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Leu Leu Ser Ser His Ser His His Ser Ser Gln Lys Ala Thr Pro Ala
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Glu Glu Val Glu Asp Ser Asn Asp Ser Ser Tyr Ser Glu Pro Pro Asp
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Val Gln Gln Gln Leu Asn His Tyr Gln Ser Ala Ala Leu Ala Arg Asn
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Asn Ser Arg Val Ser Pro Val Pro Leu Ser Gly Ala Ala Ala Gly Thr
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Glu Gln Lys Thr Glu Ala Val Leu His Cys Glu Phe Cys Glu Phe Ser
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Ser Gly Tyr Ile Gln Ser Ile Arg Arg His Tyr Arg Asp Lys His Gly
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Gly Lys Lys Leu Phe Lys Cys Lys Asp Cys Ser Phe Tyr Thr Gly Phe
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Lys Ser Ala Phe Thr Met His Val Glu Ala Gly His Ser Ala Val Pro
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Glu Glu Gly Pro Lys Asp Leu Arg Cys Pro Leu Cys Leu Tyr His Thr
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<400> 18182

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0952946.0728800

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<400> 18183

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Ser Gly Ile His Pro Asp Glu Ala Ala Glu Lys Glu Met Thr Ser Val
         35                  40                  45
Val Ala Glu Asn Gly Thr Gly Leu Val Gly Ser Leu Glu Leu Glu Glu
     50                  55                  60
Glu Gln Pro Glu Leu Lys Met Cys Gly Tyr Asn Gly Ser Val Pro Ser
 65                  70                  75                  80
Val Glu Ser Leu His Gln Glu Val Ser Val Leu Val Pro Asp Pro Thr
                 85                  90                  95
Val Ser Cys Leu Asp Asp Pro Ser His Leu Pro Asp Gln Leu Glu Asp
            100                 105                 110
Thr Pro Ile Leu Ser Glu Asp Ser Leu Glu Pro Phe Asn Ser Leu Ala
        115                 120                 125
Pro Glu Pro Val Ser Gly Gly Leu Tyr Gly Ile Asp Asp Thr Glu Leu
    130                 135                 140
Met Gly Ala Glu Asp Lys Leu Pro Leu Glu Asp Ser Pro Val Ile Ser
145                 150                 155                 160
Ala Leu Asp Cys Pro Ser Leu Asn Asn Ala Thr Ala Phe Ser Leu Leu
                165                 170                 175
Ala Asp Asp Ser Gln Thr Ser Thr Ser Ile Phe Ala Ser Pro Thr Ser
            180                 185                 190
Pro Pro Val Leu Gly Glu Ser Val Leu Gln Asp Asn Ser Phe Asp Leu
        195                 200                 205
Asn Asn Gly Ser Asp Ala Glu Gln Glu Glu Met Glu Thr Gln Ser Ser
    210                 215                 220
Asp Phe Pro Pro Ser Leu Thr Gln Pro Ala Pro Asp Gln Ser Ser Thr
225                 230                 235                 240
Ile Gln Leu His Pro Ala Thr Ser Pro Ala Val Ser Pro Thr Thr Ser
                245                 250                 255
Pro Ala Val Ser Leu Val Val Ser Pro Ala Ala Ser Pro Glu Ile Ser
            260                 265                 270
Pro Glu Val Cys Pro Ala Ala Ser Thr Val Val Ser Pro Ala Val Phe
        275                 280                 285
Ser Val Val Ser Pro Ala Ser Ser Ala Val Leu Pro Ala Val Ser Leu
    290                 295                 300
Glu Val Pro Leu Thr Ala Ser Val Thr Ser Pro Lys Ala Ser Pro Val
305                 310                 315                 320
Thr Ser Pro Ala Ala Ala Phe Pro Thr Ala Ser Pro Ala Asn Lys Asp
                325                 330                 335
Val Ser Ser Phe Leu Glu Thr Thr Ala Asp Val Glu Glu Ile Thr Gly
            340                 345                 350
Glu Gly Leu Thr Ala Ser Gly Ser Gly Asp Val Met Arg Arg Cys Ile
        355                 360                 365
Ala Thr Pro Glu Glu Val Arg Leu Pro Leu Gln His Gly Trp Arg Arg
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0056260-050296

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                405                 410                 415
Lys Tyr Leu Ser Arg Asn Val Val His Ser Val Arg Arg Glu His Phe
            420                 425                 430
Ser Phe Ser Pro Arg Met Pro Val Gly Asp Phe Phe Glu Glu Arg Asp
        435                 440                 445
Thr Pro Glu Gly Leu Gln Trp Val Gln Leu Ser Ala Glu Glu Ile Pro
    450                 455                 460
Ser Arg Ile Gln Ala Ile Thr Gly Lys Arg Gly Arg Pro Arg Asn Thr
465                 470                 475                 480
Glu Lys Ala Lys Thr Lys Glu Val Pro Lys Val Lys Arg Gly Arg Gly
                485                 490                 495
Arg Pro Pro Lys Val Lys Ile Thr Glu Leu Leu Asn Lys Thr Asp Asn
            500                 505                 510
Arg Pro Leu Lys Lys Leu Glu Ala Gln Glu Thr Leu Asn Glu Glu Asp
        515                 520                 525
Lys Ala Lys Ile Ala Lys Ser Lys Lys Lys Met Arg Gln Lys Val Gln
    530                 535                 540
Arg Gly Glu Cys Gln Thr Thr Ile Gln Gly Gln Ala Arg Asn Lys Arg
545                 550                 555                 560
Lys Gln Glu Thr Lys Ser Leu Lys Gln Lys Glu Ala Lys Lys Lys Ser
                565                 570                 575
Lys Ala Glu Lys Glu Lys Gly Lys Thr Lys Gln Glu Lys Leu Lys Glu
            580                 585                 590
Lys Val Lys Arg Glu Lys Lys Glu Lys Val Lys Met Lys Glu Lys Glu
        595                 600                 605
Glu Val Thr Lys Ala Lys Pro Ala Cys Lys Ala Asp Lys Thr Leu Ala
    610                 615                 620
Thr Gln Arg Arg Leu Glu Glu Arg Gln Arg Gln Gln Met Ile Leu Glu
625                 630                 635                 640
Glu Met Lys Lys Pro Thr Glu Asp Met Cys Leu Thr Asp His Gln Pro
                645                 650                 655
Leu Pro Asp Phe Ser Arg Val Pro Gly Leu Thr Leu Pro Ser Gly Ala
            660                 665                 670
Phe Ser Asp Cys Leu Thr Ile Val Glu Phe Leu His Ser Phe Gly Lys
        675                 680                 685
Val Leu Gly Phe Asp Pro Ala Lys Asp Val Pro Ser Leu Gly Val Leu
    690                 695                 700
Gln Glu Gly Leu Leu Cys Gln Gly Asp Ser Leu Gly Glu Val Gln Asp
705                 710                 715                 720
Leu Leu Val Arg Leu Leu Lys Ala Ala Leu His Asp Pro Gly Phe Pro
                725                 730                 735
Ser Tyr Cys Gln Ser Leu Lys Ile Leu Gly Glu Lys Val Ser Glu Ile
            740                 745                 750
Pro Leu Thr Arg Asp Asn Val Ser Glu Ile Leu Arg Cys Phe Leu Met
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0960450 - 0960800

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Val His Glu Leu Asn Gly Ser Thr Leu Ile Ile Asn Glu Ile Asp Lys
                805                 810                 815
Thr Leu Glu Ser Met Ser Ser Tyr Arg Lys Asn Lys Trp Ile Val Glu
            820                 825                 830
Gly Arg Leu Arg Arg Leu Lys Thr Val Leu Ala Lys Arg Thr Gly Arg
        835                 840                 845
Ser Glu Val Glu Met Glu Gly Pro Glu Glu Cys Leu Gly Arg Arg Arg
    850                 855                 860
Ser Ser Arg Ile Met Glu Glu Thr Ser Gly Met Glu Glu Glu Glu Glu
865                 870                 875                 880
Glu Glu Ser Ile Ala Ala Val Pro Gly Arg Arg Gly Arg Arg Asp Gly
                885                 890                 895
Glu Val Asp Ala Thr Ala Ser Ser Ile Pro Glu Leu Glu Arg Gln Ile
            900                 905                 910
Glu Lys Leu Ser Lys Arg Gln Leu Phe Phe Arg Lys Lys Leu Leu His
        915                 920                 925
Ser Ser Gln Met Leu Arg Ala Val Ser Leu Gly Gln Asp Arg Tyr Arg
    930                 935                 940
Arg Arg Tyr Trp Val Leu Pro Tyr Leu Ala Gly Ile Phe Val Glu Gly
945                 950                 955                 960
Thr Glu Gly Asn Leu Val Pro Glu Glu Val Ile Lys Lys Glu Thr Asp
                965                 970                 975
Ser Leu Lys Val Ala Ala His Ala Ser Leu Asn Pro Ala Leu Phe Ser
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Met Lys Met Glu Leu Ala Gly Ser Asn Thr Thr Ala Ser Ser Pro Ala
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Arg Ala Arg Gly Arg Pro Arg Lys Thr Lys Pro Gly Ser Met Gln Pro
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Ala Gln Leu Gln Pro Glu Ala Gln Leu His Ala Pro Ala Gln Pro Gln
                1045                1050                1055
Pro Gln Leu Gln Leu Gln Leu Gln Ser His Lys Gly Phe Leu Glu Gln
            1060                1065                1070
Glu Gly Ser Pro Leu Ser Leu Gly Gln Ser Gln His Asp Leu Ser Gln
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Ser Ala Phe Leu Ser Trp Leu Ser Gln Thr Gln Ser His Ser Ser Leu
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Arg Asp Pro Glu Met Leu Asp Ala Met Leu Lys Ala Leu His Pro Arg
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Gly Ile Arg Glu Lys Ala Leu His Lys His Leu Asn Lys His Arg Asp
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Thr Cys Pro Ser Pro Asp Ser Thr Arg Glu Asp Leu Ala Tyr Cys Glu
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<400> 18184

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<212> PRT
<213> Homo sapiens

<400> 18187

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     50                  55                  60
Lys Gln Thr Glu Asn Leu Gln Arg Leu Gln Glu Asn Val Glu Lys Thr
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Arg His Thr Ala Gln Leu Arg Glu Glu Leu Leu Lys Leu Pro Cys Pro
1810 1815 1820
Glu Asp Leu Asp Pro Asp Thr Asp Asp Ala Pro Glu Val Cys Arg Ala
1825 1830 1835 1840
Thr Thr Gly Ala Glu Glu Thr Leu Met His Asp Gln Val Lys Pro Ser
1845 1850 1855
Ser Ser Lys Glu Leu Pro Ser Asp Phe Gln Leu
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<210> 18205
<211> 1569

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (41)..(1342)

<400> 18205
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catggaaagt gtctttgaag aagtatttaa actgctggag tgccctcacc tgaatgtgcg 240
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<210> 18206
<211> 434
<212> PRT
<213> Homo sapiens

<400> 18206
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Val Gly Glu Ile Ser Val Asn Thr Ser Val Ala Phe Leu Pro Tyr Met

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0002760-030202

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Glu Ser Val Phe Glu Glu Val Phe Lys Leu Leu Glu Cys Pro His Leu
     50                  55                  60
Asn Val Arg Lys Ala Ala His Glu Ala Leu Gly Gln Phe Cys Cys Ala
 65                  70                  75                  80
Leu His Lys Ala Cys Gln Ser Cys Pro Ser Glu Pro Asn Thr Ala Ala
                 85                  90                  95
Leu Gln Ala Ala Leu Ala Arg Val Val Pro Ser Tyr Met Gln Ala Val
            100                 105                 110
Asn Arg Glu Arg Glu Arg Gln Val Val Met Ala Val Leu Glu Ala Leu
        115                 120                 125
Thr Gly Val Leu Arg Ser Cys Gly Thr Leu Thr Leu Lys Pro Pro Gly
    130                 135                 140
Arg Leu Ala Glu Leu Cys Gly Val Leu Lys Ala Val Leu Gln Arg Lys
145                 150                 155                 160
Thr Ala Cys Gln Asp Thr Asp Glu Glu Glu Glu Glu Glu Asp Asp Asp
                165                 170                 175
Gln Ala Glu Tyr Asp Ala Met Leu Leu Glu His Ala Gly Glu Ala Ile
            180                 185                 190
Pro Ala Leu Ala Ala Ala Ala Gly Gly Asp Ser Phe Ala Pro Phe Phe
        195                 200                 205
Ala Gly Phe Leu Pro Leu Leu Val Cys Lys Thr Lys Gln Gly Cys Thr
    210                 215                 220
Val Ala Glu Lys Ser Phe Ala Val Gly Thr Leu Ala Glu Thr Ile Gln
225                 230                 235                 240
Gly Leu Gly Ala Ala Ser Ala Gln Phe Val Ser Arg Leu Leu Pro Val
                245                 250                 255
Leu Leu Ser Thr Ala Gln Glu Ala Asp Pro Glu Val Arg Ser Asn Ala
            260                 265                 270
Ile Phe Gly Met Gly Val Leu Ala Glu His Gly Gly His Pro Ala Gln
        275                 280                 285
Glu His Phe Pro Lys Leu Leu Glu Leu Leu Phe Pro Leu Leu Ala Arg
    290                 295                 300
Glu Arg His Asp Arg Val Arg Asp Asn Ile Cys Gly Ala Leu Ala Arg
305                 310                 315                 320
Leu Leu Met Ala Ser Pro Thr Arg Lys Pro Glu Pro Gln Val Leu Ala
                325                 330                 335
Ala Leu Leu His Ala Leu Pro Leu Lys Glu Asp Leu Glu Glu Trp Val
            340                 345                 350
Thr Ile Gly Arg Leu Phe Ser Phe Leu Tyr Gln Ser Ser Pro Asp Gln
        355                 360                 365
Val Ile Asp Val Ala Pro Glu Leu Leu Arg Ile Cys Ser Leu Ile Leu
    370                 375                 380
Ala Asp Asn Lys Ile Pro Pro Asp Thr Lys Ala Ala Leu Leu Leu Leu
385                 390                 395                 400
Leu Thr Phe Leu Ala Lys Gln His Thr Asp Ser Phe Gln Ala Ala Leu
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Gly Ser Leu Pro Val Asp Lys Ala Gln Glu Leu Gln Ala Val Leu Gly
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420 425 430
Leu Ser

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<211> 1616
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1)..(729)

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ctccggggcc aactcaagat ggtggacagc tttcacaggg tgagtctaca ttatgggatt 180
atgtgcctga aacggctcaa ctatgaccgg aaggacctgg agcggaggcg ggaagaaagt 240
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gggctgggcc tgaaggaatt tgccacgaac ctcacggaga gcggggtaca cggggcactg 360
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cagaatgcac aggcccggca gcttctggag aaggaattca gcaaccttat ctccttaggc 480
acagacaggc ggctggacga ggacagcgcc aagtctttca gccgctcccc atcctggcgg 540
aagatgttcc gggagaagga cctccgaggc gtaactcccg actcagctga gatgttgccc 600
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<210> 18208
<211> 243
<212> PRT
<213> Homo sapiens

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0030020040.0 2009.05.04

<400> 18208

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Leu Asp His Leu Asn Lys Lys Glu Leu Arg Gly Gln Leu Lys Met Val
         35                  40                  45
Asp Ser Phe His Arg Val Ser Leu His Tyr Gly Ile Met Cys Leu Lys
     50                  55                  60
Arg Leu Asn Tyr Asp Arg Lys Asp Leu Glu Arg Arg Arg Glu Glu Ser
 65                  70                  75                  80
Gln Thr Gln Ile Arg Asp Val Met Val Trp Ser Asn Glu Arg Val Met
                 85                  90                  95
Gly Trp Val Ser Gly Leu Gly Leu Lys Glu Phe Ala Thr Asn Leu Thr
            100                 105                 110
Glu Ser Gly Val His Gly Ala Leu Leu Ala Leu Asp Glu Thr Phe Asp
        115                 120                 125
Tyr Ser Asp Leu Ala Leu Leu Leu Gln Ile Pro Thr Gln Asn Ala Gln
    130                 135                 140
Ala Arg Gln Leu Leu Glu Lys Glu Phe Ser Asn Leu Ile Ser Leu Gly
145                 150                 155                 160
Thr Asp Arg Arg Leu Asp Glu Asp Ser Ala Lys Ser Phe Ser Arg Ser
                165                 170                 175
Pro Ser Trp Arg Lys Met Phe Arg Glu Lys Asp Leu Arg Gly Val Thr
            180                 185                 190
Pro Asp Ser Ala Glu Met Leu Pro Pro Asn Phe Arg Ser Ala Ala Ala
        195                 200                 205
Gly Ala Leu Gly Ser Pro Gly Leu Pro Leu Arg Lys Leu Gln Pro Glu
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Gly Gln Thr Ser Gly Ser Ser Arg Ala Asp Gly Val Ser Val Arg Thr
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<212> DNA
<213> Homo sapiens

<400> 18209

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tgtttggttc ggctggaaac gctattcaag atatttaagc agctggatcc cgagaatact 360
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<211> 2374
<212> DNA
<213> Homo sapiens

<220>
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<222> (177)..(1703)

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<212> PRT
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35 40 45
Glu Pro Leu Pro Thr Gln Arg Gly Ala Gln Glu Lys Met Gly Thr Pro
50 55 60
Ala Glu Gln Ala Gln Gly Glu Arg Asn Val Pro Pro Pro Lys Ser Pro
65 70 75 80
Leu Arg Leu Ile Ala Asn Ala Ile Arg Arg Ser Leu Glu Pro Leu Leu
85 90 95
Ser Asn Ser Glu Gly Gly Lys Lys Ala Trp Ala Lys Gln Glu Ser Lys
100 105 110
Thr Leu Pro Thr Gln Ala Cys Thr Arg Ser Phe Ser Leu Arg Lys Thr
115 120 125
Asn Ser Asn Lys Asp Gly Asp Gln His Ser Pro Gly Arg Asn Gln Ser
130 135 140

0602450.0002800

Ser Ala Phe Ser Pro Pro Asp Pro Ala Leu Arg Thr His Ser Leu Pro
145 150 155 160
Asn Arg Pro Ser Lys Val Phe Pro Ala Leu Arg Ser Pro Pro Cys Ser
165 170 175
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180 185 190
Asn Phe Pro Asp Ala Ser Lys Pro Pro Lys Lys Arg Ile Ser Leu Phe
195 200 205
Ser Ser Leu Arg Leu Lys Asp Lys Ser Phe Glu Ser Phe Leu Gln Glu
210 215 220
Ser Arg Gln Arg Lys Asp Ile Arg Asp Leu Phe Gly Ser Pro Lys Arg
225 230 235 240
Lys Val Leu Pro Glu Asp Ser Ala Gln Ala Leu Glu Lys Leu Leu Gln
245 250 255
Pro Phe Lys Ser Thr Ser Leu Arg Gln Ala Ala Pro Pro Pro Pro Pro
260 265 270
Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Thr Ala Gly Gly
275 280 285
Ala Asp Ser Lys Asn Phe Pro Leu Arg Ala Gln Val Thr Glu Ala Ser
290 295 300
Ser Ser Ala Ser Ser Thr Ser Ser Ser Ser Ala Asp Glu Glu Phe Asp
305 310 315 320
Pro Gln Leu Ser Leu Gln Leu Lys Glu Lys Lys Thr Leu Arg Arg Arg
325 330 335
Lys Lys Leu Glu Lys Ala Met Lys Gln Leu Val Lys Gln Glu Glu Leu
340 345 350
Lys Arg Leu Tyr Lys Ala Gln Ala Ile Gln Arg Gln Leu Glu Glu Val
355 360 365
Glu Glu Arg Gln Arg Ala Ser Glu Ile Gln Gly Val Arg Leu Glu Lys
370 375 380
Ala Leu Arg Gly Glu Ala Asp Ser Gly Thr Gln Asp Glu Ala Gln Leu
385 390 395 400
Leu Gln Glu Trp Phe Lys Leu Val Leu Glu Lys Asn Lys Leu Met Arg
405 410 415
Tyr Glu Ser Glu Leu Leu Ile Met Ala Gln Glu Leu Glu Leu Glu Asp
420 425 430
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435 440 445
Glu Ser Gln Lys Asp Glu Lys Asp Leu Asn Glu Glu Gln Glu Val Phe
450 455 460
Thr Glu Leu Met Gln Val Ile Glu Gln Arg Asp Lys Leu Val Asp Ser
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<212> DNA
<213> Homo sapiens

<220>
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<222> (114)..(815)

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<213> Homo sapiens

<400> 18213
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35 40 45
Asn Ser Asn Asp Ala Pro Thr Pro Met Cys Thr Pro Ile Phe Trp Glu
50 55 60
Pro Pro Ala Ala Ser Leu Lys Pro Pro Ala Leu Leu Pro Pro Ser Ala
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Ser Arg Ala Ser Leu Asp Ser Gln Thr Ser Pro Asp Ser Pro Ser Ser
85 90 95
Thr Pro Thr Pro Ser Pro Val Ser Arg Arg Ser Ala Ser Pro Glu Pro
100 105 110
Ala Pro Arg Ser Pro Val Pro Pro Pro Lys Pro Ser Gly Ser Pro Cys
115 120 125
Thr Pro Leu Leu Pro Met Ala Gly Val Leu Ala Gln Asn Gly Ser Ala
130 135 140
Ser Ala Pro Gly Thr Val Arg Arg Leu Ala Gly Arg Phe Glu Gly Gly
145 150 155 160
Ala Glu Gly Arg Ala Gln Asp Ala Asp Ala Pro Glu Pro Gly Leu Gln
165 170 175
Ala Arg Ala Asp Val Asn Gly Glu Arg Glu Ala Pro Leu Thr Gly Ser
180 185 190
Gly Ser Gln Glu Asn Gly Ala Pro Gly Glu Cys Gly Gly Trp Gly Ala
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Leu Gly Asp Leu Asn Pro Pro Ile Phe Ser Val Phe Ser Ala Asn Asn
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Phe Gln Gly Leu Pro Phe Gln Lys Trp Ser
225 230

<210> 18214
<211> 2184
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (9)..(1334)

<400> 18214

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<211> 442
<212> PRT
<213> Homo sapiens

<400> 18215
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Val Thr Ala Pro Pro Glu Arg Ile Val His Pro Ala Ala Arg Ser Leu
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Asp Leu His Phe Gly Ala Pro Gly Arg Val Glu Leu Arg Cys Glu Val
                85                  90                  95
Ala Pro Ala Gly Ser Gln Val Arg Trp Tyr Lys Asp Gly Leu Glu Val
            100                 105                 110
Glu Ala Ser Asp Ala Leu Gln Leu Gly Ala Glu Gly Pro Thr Arg Thr
        115                 120                 125
Leu Thr Leu Pro His Ala Gln Pro Glu Asp Ala Gly Glu Tyr Val Cys
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Glu Thr Arg His Glu Ala Ile Thr Phe Asn Val Ile Leu Ala Glu Pro
145                 150                 155                 160
Pro Val Gln Phe Leu Ala Leu Glu Thr Thr Pro Ser Pro Leu Cys Val
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Ala Pro Gly Glu Pro Val Val Leu Ser Cys Glu Leu Ser Arg Ala Gly
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Ala Pro Val Val Trp Ser His Asn Gly Gly Pro Val Gln Glu Gly Glu
        195                 200                 205
Gly Leu Glu Leu His Ala Glu Gly Pro Arg Arg Val Leu Cys Ile Gln
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Ala Ala Gly Pro Ala His Ala Gly Leu Tyr Thr Cys Gln Ser Gly Ala
225                 230                 235                 240
Ala Pro Gly Ala Pro Ser Leu Ser Phe Thr Val Gln Val Ala Glu Pro
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Leu Leu Val Lys Leu Val Ser Asp Leu Thr Pro Leu Thr Val His Glu
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Gly Asp Asp Ala Thr Phe Arg Cys Glu Val Ser Pro Pro Asp Ala Asp
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Val Thr Trp Leu Arg Asn Gly Ala Val Val Thr Pro Gly Pro Gln Val
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Glu Met Ala Gln Asn Gly Ser Ser Arg Ile Leu Thr Leu Arg Gly Cys
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Gln Leu Gly Asp Ala Gly Thr Val Thr Leu Arg Ala Gly Ser Thr Ala
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Arg Leu Gln Asp Val Arg Ala Glu Glu Gly Gln Asp Val Cys Leu Glu
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0960456.0720800

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<210> 18216
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (281)..(598)

<400> 18216

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0062700.5950

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<211> 106
<212> PRT
<213> Homo sapiens

<400> 18217
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35 40 45
Ser Leu Arg Thr Val Phe Leu Asn Lys Glu Leu Gln Ser Trp Leu His
50 55 60
His Pro Pro Ser Lys Thr Ser Pro Val Ser Gly Ile Trp Leu Tyr Cys
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Gly Leu Thr Glu Lys Phe Leu Ser Gly Pro Val Asn Leu Lys Lys Lys
85 90 95
Lys Lys Glu Lys Arg Val Leu Pro Thr His
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<210> 18218
<211> 2159
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (434)..(1495)

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0060203.0076.0800

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<210> 18219
<211> 354
<212> PRT
<213> Homo sapiens

<400> 18219
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35 40 45
Pro Arg Gly Pro Phe Pro Pro Gly Asp Ile Phe Ser Gln Pro Glu Arg
50 55 60
Pro Phe Leu Ala Pro Gly Arg Gln Ser Val Asp Asn Val Thr Asn Pro

0050450-0050800

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                85                  90                  95
Arg Asp Tyr Arg Phe Pro Pro Ile Glu Thr Arg Glu Ser Ile Ser Arg
            100                 105                 110
Pro Pro Pro Val Asp Val Arg Asp Val Val Gly Arg Pro Ile Asp Pro
        115                 120                 125
Arg Glu Gly Pro Gly Arg Pro Pro Leu Asp Gly Arg Asp His Phe Gly
    130                 135                 140
Arg Pro Pro Val Asp Ile Arg Glu Asn Leu Val Arg Pro Gly Ile Asp
145                 150                 155                 160
His Leu Gly Arg Arg Asp His Phe Gly Phe Asn Pro Glu Lys Pro Trp
                165                 170                 175
Gly His Arg Gly Asp Phe Asp Glu Arg Glu His Arg Val Leu Pro Val
            180                 185                 190
Tyr Gly Gly Pro Lys Gly Leu His Glu Glu Arg Gly Arg Phe Arg Ser
        195                 200                 205
Gly Asn Tyr Arg Phe Asp Pro Arg Ser Gly Pro Trp Asn Arg Gly Phe
    210                 215                 220
Gly Gln Glu Val His Arg Asp Phe Asp Asp Arg Arg Arg Pro Trp Glu
225                 230                 235                 240
Arg Gln Arg Asp Arg Asp Asp Arg Asp Phe Asp Phe Cys Arg Glu Met
                245                 250                 255
Asn Gly Asn Arg Leu Gly Arg Asp Arg Ile Gln Asn Thr Trp Val Pro
            260                 265                 270
Pro Pro His Ala Arg Val Phe Asp Tyr Phe Glu Gly Ala Thr Ser Gln
        275                 280                 285
Arg Lys Gly Asp Asn Val Pro Gln Val Asn Gly Glu Asn Thr Glu Arg
    290                 295                 300
His Ala Gln Pro Pro Pro Ile Pro Val Gln Asn Asp Pro Glu Leu Tyr
305                 310                 315                 320
Glu Lys Leu Thr Ser Ser Asn Glu Ile Asn Lys Glu Lys Ser Asp Thr
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Val Ala Asp Ile Glu Ser Glu Pro Val Val Glu Ser Thr Glu Thr Glu
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Gly Thr
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<210> 18220
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (174)..(1421)

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<210> 18221
<211> 416
<212> PRT
<213> Homo sapiens

0050204-050205

<400> 18221

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Leu Lys Leu Asp Leu Gly Glu Lys Val Glu Arg Ser Val Val Thr Leu
        35                  40                  45
Leu Gln Arg Ala Thr Glu Leu Phe Tyr Glu Gly Arg Arg Asp Glu Cys
    50                  55                  60
Leu Gln Ser Ser Glu Val Ile Leu Gly Tyr Ser Trp Glu Lys Leu Asn
65                  70                  75                  80
Thr Gly Thr Trp Gln Asp Val Asp Lys Asp Trp Arg Arg Val Tyr Ala
                85                  90                  95
Ile Gly Cys Leu Leu Lys Ala Leu Cys Leu Cys Gln Ala Pro Glu Asp
            100                 105                 110
Ala Asn Thr Val Ala Ala Ala Leu Arg Val Cys Asp Met Gly Leu Leu
        115                 120                 125
Met Gly Ala Ala Ile Leu Gly Asp Ile Leu Leu Lys Val Ala Ala Ile
    130                 135                 140
Leu Gln Thr His Leu Pro Gly Lys Arg Pro Ala Arg Gly Ser Leu Pro
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Asp Val Lys Leu Glu Lys Thr Val Pro Arg Leu His Arg Pro Ser Leu
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Gln His Phe Arg Glu Gln Phe Leu Val Pro Gly Arg Pro Val Ile Leu
        195                 200                 205
Lys Gly Val Ala Asp His Trp Pro Cys Met Gln Lys Trp Ser Leu Glu
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Tyr Ile Gln Glu Ile Ala Gly Cys Arg Thr Val Pro Val Glu Val Gly
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Ser Arg Tyr Thr Asp Glu Glu Trp Ser Gln Thr Leu Met Thr Val Asn
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Glu Phe Ile Ser Lys Tyr Ile Val Asn Glu Pro Arg Asp Val Gly Tyr
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Leu Ala Gln His Gln Leu Phe Asp Gln Ile Pro Glu Leu Lys Gln Asp
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Ile Ser Ile Pro Asp Tyr Cys Ser Leu Gly Asp Gly Glu Glu Glu Glu
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Ile Thr Ile Asn Ala Trp Phe Gly Pro Gln Gly Thr Ile Ser Pro Leu
305                 310                 315                 320
His Gln Asp Pro Gln Gln Asn Phe Leu Val Gln Val Met Gly Arg Lys
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Tyr Ile Arg Leu Tyr Ser Pro Gln Glu Ser Gly Ala Leu Tyr Pro His
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Asp Thr His Leu Leu His Asn Thr Ser Gln Val Asp Val Glu Asn Pro
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<213> Homo sapiens

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<222> (296)..(1348)

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<212> PRT
<213> Homo sapiens

<400> 18223

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Ala	Phe	Val	Ser	Leu	Ser	Gln	Pro	Glu	Gln	Val	Lys	Ile	Ala	Val	Asn
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0356204 20200

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Gly Leu Glu Asp Gly Val Ser Gly Glu Ile Ser Asp Thr Glu Leu Glu
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Gln Thr Asp Ser Cys Ala Glu Pro Leu Ser Glu Gly Arg Lys Lys Ala
305                 310                 315                 320
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<400> 18224

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Ala Lys Lys Ala Leu Ala Gly Gln Leu Pro Ala Val Gly Arg Ser Met
65 70 75 80
Cys Val Glu Ile Ser Leu Lys Thr Ser Glu Gly Asp Ser Met Glu Leu
85 90 95
Glu Ile Trp Cys Leu Glu Met Asn Glu Lys Cys Asp Lys Glu Ile Lys
100 105 110
Val Ser Tyr Thr Val Tyr Asn Arg Leu Ser Leu Leu Leu Lys Ser Leu
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130 135 140
Gly His Glu Tyr Val Ile Leu Tyr Arg Ile Tyr Phe Gly Glu Val Gln

US 2005/0260200 A1

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        195                 200                 205
Gly Ile Ile Ile Asp His Phe Val Asp Arg Pro Tyr Pro Ser Ser Ser
    210                 215                 220
Pro Met His Pro Cys Asn Tyr Arg Thr Ala Gly Glu Asp Thr Gly Val
225                 230                 235                 240
Ile Tyr Pro Ser Val Glu Asp Ser Gln Glu Val Cys Thr Thr Ser Phe
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Ser Thr Ser Pro Pro Ser Gln Leu Met Val Pro Gly Lys Glu Gly Gly
            260                 265                 270
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Val Gly Ala Phe Val Asn Lys Pro Ile Asn Gln Val Thr Leu Thr Ser
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<210> 18228
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<212> PRT
<213> Homo sapiens

<400> 18228
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         35                  40                  45
Thr His Ser Gly Glu Lys Pro His Gly Cys Ser Glu Cys Gln Lys Ala
     50                  55                  60
Phe Ser Arg Lys Ser Leu Leu Ile Leu His Gln Arg Ile His Thr Gly
 65                  70                  75                  80
Glu Lys Pro Tyr Gly Cys Ser Glu Cys Gly Lys Ala Phe Ser Arg Lys
                 85                  90                  95
Ser Gln Leu Lys Arg His Gln Ile Thr His Thr Ile Glu Lys Pro Tyr
            100                 105                 110
Ser Cys Ser Glu Cys Gly Lys Ala Phe Ser Gln Lys Leu Lys Leu Ile
        115                 120                 125
Thr His Gln Arg Ala His Thr Gly Glu Lys Pro Tyr Pro Cys Ser His
    130                 135                 140
Cys Gly Lys Ala Phe Phe Trp Lys Ser Gln Leu Ile Thr His Gln Arg
145                 150                 155                 160
Thr His Thr Gly Lys Lys Pro Tyr Gly Cys Gly Glu Cys Gln Lys Ala
                165                 170                 175
Phe Ser Arg Asn Ser Leu Leu Ile Arg His Gln Arg Ile His Thr Gly
            180                 185                 190
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<220>
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<400> 18230

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Leu	Ser	Gln	His	Gln	Leu	Tyr	Leu	Leu	Leu	Leu	Leu	Thr	Thr	His	Ser
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<210> 18231
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<212> DNA
<213> Homo sapiens

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<222> (64)..(1590)

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<212> PRT
<213> Homo sapiens

<400> 18232

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        35                  40                  45
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    50                  55                  60
Glu Arg Val Pro Ile Leu Trp His Phe Leu Gln Lys Glu Ala Glu Leu
65                  70                  75                  80
Arg Leu Val Lys Phe Leu Pro Glu Ile Leu Ala Leu Gln Arg Asp Leu
                85                  90                  95
Val Lys Gln Phe Gln Asn Val Gln Gln Val Glu Tyr Ser Ser Ile Arg
            100                 105                 110
Gly Phe Leu Ser Lys His Ser Ser Asp Gly Leu Arg Gln Leu Leu His
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Asn Arg Ile Thr Val Phe Leu Ser Thr Trp Asn Lys Leu Arg Arg Ser
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195 200 205
Ser Tyr Ser Val Asp Ala Ala Glu Val Thr Glu Leu His Val Ile Ser
210 215 220
Tyr Glu Val Glu Arg Asp Leu Thr Pro Leu Ile Leu Ser Asn Cys Gln
225 230 235 240
Tyr Gln Val Glu Glu Gly Arg Glu Thr Val Gln Glu Phe Asp Leu Glu
245 250 255
Lys Ile Gln Arg Gln Ile Val Ser Arg Phe Leu Gln Gly Lys Pro Arg
260 265 270
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275 280 285
Tyr Glu His Leu Phe Met Asp Ile Lys Asn Lys Met Ala Gln Asp Ser
290 295 300
Leu Pro Ser Ser Val Ile Ser Ala Ile Ser Gly Gln Leu Gln Ser Tyr
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Ser Asp Ala Cys Glu Val Leu Ser Val Val Glu Val Thr Leu Gly Phe
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Gln Asp Ile Leu Gln Met Gly Asp Gln Thr Ile His Val Leu Lys Ala
355 360 365
Leu Asn Arg Cys Gln Leu Lys His Thr Ile Ala Leu Trp Gln Phe Leu
370 375 380
Ser Ala His Lys Ser Glu Gln Leu Leu Arg Leu His Lys Glu Pro Phe
385 390 395 400
Gly Glu Ile Ser Ser Arg Tyr Lys Ala Asp Leu Ser Pro Glu Asn Ala
405 410 415
Lys Leu Leu Ser Thr Phe Leu Asn Gln Thr Gly Leu Asp Ala Phe Leu
420 425 430
Leu Glu Leu His Glu Met Ile Ile Leu Lys Leu Lys Asn Pro Gln Thr
435 440 445
Gln Thr Glu Glu Arg Phe Arg Pro Gln Trp Ser Leu Arg Asp Thr Leu
450 455 460
Val Ser Tyr Met Gln Thr Lys Glu Ser Glu Ile Leu Pro Glu Met Ala
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Lys Thr Ala Ala Val Leu Lys Trp Asn Arg Glu Met Arg
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<211> 2161

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<212> DNA
<213> Homo sapiens

<220>
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<211> 235
<212> PRT
<213> Homo sapiens

<400> 18234
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35 40 45
Val Leu Asn Lys Asp Ile Gln Glu Asp Ser Gly Met Glu Pro Arg Asn
50 55 60
Glu Glu Glu Gly Asn Ser Glu Glu Ile Lys Ala Lys Val Lys Asn Lys
65 70 75 80
Lys Gln Gly Cys Lys Asn Glu Glu Val Leu Ala Val Leu Gly His Glu
85 90 95
Leu Gly His Trp Lys Leu Gly His Thr Val Lys Asn Ile Ile Ile Ser
100 105 110
Gln Met Asn Ser Phe Leu Cys Phe Phe Leu Phe Ala Val Leu Ile Gly
115 120 125
Arg Lys Glu Leu Phe Ala Ala Phe Gly Phe Tyr Asp Ser Gln Pro Thr
130 135 140
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180 185 190
Ser Ala Leu Ile Lys Leu Asn Lys Asp Asn Leu Gly Phe Pro Val Ser
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<212> DNA
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         35                  40                  45
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     50                  55                  60
Ala Lys Cys Glu Leu Ala Phe Leu His Thr Ser His Cys Leu Ala Ser
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Gly Glu Val Met Ile Ser Ser Leu Gly Asp Val Lys Gly Asn Gly Lys
                 85                  90                  95
Gly Gly Phe Val Leu Leu Asp Gly Glu Thr Phe Glu Val Lys Gly Thr
            100                 105                 110
Trp Glu Arg Pro Gly Gly Ala Ala Pro Leu Gly Tyr Asp Phe Trp Tyr
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Gln Pro Arg His Asn Val Met Ile Ser Thr Glu Trp Ala Ala Pro Asn
    130                 135                 140
Val Leu Arg Asp Gly Phe Asn Pro Ala Asp Val Glu Ala Gly Leu Tyr
145                 150                 155                 160
Gly Ser His Leu Tyr Val Trp Asp Trp Gln Arg His Glu Ile Val Gln
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Thr Leu Ser Leu Lys Asp Gly Leu Ile Pro Leu Glu Ile Arg Phe Leu
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His Asn Pro Asp Ala Ala Gln Gly Phe Val Gly Cys Ala Leu Ser Ser
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Leu Glu Lys Ser Gln Gly Glu Asp Val Glu Asp Asp His Arg Ala Glu
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Gly Val His Asn Ile Asp Val Pro Asn Val Glu Phe Ala Leu Ala Val
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Gln	Pro	Pro	Gly	Cys	Lys	Asp	His	Gly	Cys	Ser	Ser	Gly	Ser	Pro	Phe
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Ser	Pro	Asn	Val	Gly	Ala	Leu	Lys	Val	Arg	Glu	Asn	Arg	Val	Leu	Ser
145					150					155					160
Val	Pro	Pro	Asp	Gln	Arg	Ile	Thr	Leu	Thr	Asp	Leu	Phe	Glu	Asn	Ala
				165					170					175	
Tyr	Gly	Ser	Ser	Met	Lys	Gly	Arg	Glu	Leu	Glu	Glu	Leu	Lys	Asp	Asn
			180					185					190		
Ile	Glu	Phe	Arg	Gly	His	Lys	Pro	Leu	Asn	Ser	Ile	Thr	Val	Ser	Lys

0050250-0050800

0065456-070800

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Glu Glu Asn Lys Lys Cys Gln Asp Arg Ser His Leu Ser Ile Ser Pro
225                 230                 235                 240
Val Ser Leu Pro Lys His Gln Leu Ser Gln Ser Phe Leu Lys Ser Ser
                245                 250                 255
Lys Glu Tyr Cys Thr Tyr Val Val Cys Asn Ala Thr Asn Ser Ser Leu
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Ser Lys Asn Cys Ala Leu Asp Phe Asn Glu Glu Asn Asp Ala Asp Asp
        275                 280                 285
Glu Gly Glu Ile Trp Tyr Asn Pro Ile Pro Glu Asp Asp Asp Leu Gly
    290                 295                 300
Ile Ser Ser Ala Leu Ser Phe Gly Glu Ala Asp Ser Ala Val Leu Lys
305                 310                 315                 320
Leu Pro Ala Val Asn Leu Ser Met Leu Ser Gly Ser Asp Leu Met Lys
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Asp Ile Gln Thr Thr Arg Ser Asn Gly Met Asn Pro Ile His Pro Ala
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Thr Gln Glu Gly Ile Met Val Glu Asp Ser Pro Met Leu Lys Ser Pro
385                 390                 395                 400
Phe Ala Gly Ser Gly Ile Leu Ala Ala Thr Asn Ser Thr Glu Leu Gly
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Ile Met Glu Pro Ser Ser Pro Asn Pro Ser Pro Val Lys Lys Gly Ser
            420                 425                 430
Ser Ile Asn Trp Ser Leu Pro Asp Lys Ile Lys Ser Pro Arg Thr Val
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Arg Lys Leu Ser Met Lys Met Lys Lys Leu Pro Glu Phe Ser Arg Lys
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Leu Ser Val Lys Gly Thr Leu Asn Tyr Ile Asn Ser Pro Asp Asn Thr
465                 470                 475                 480
Pro Ser Leu Ser Lys Tyr Asn Cys Arg Glu Ile His His Thr Asp Ile
                485                 490                 495
Leu Pro Ser Gly Asn Thr Thr Thr Ala Ala Lys Arg Asn Val Ile Ser
            500                 505                 510
Arg Tyr His Leu Asp Thr Ser Val Ser Ser Gln Gln Ser Tyr Gln Lys
        515                 520                 525
Lys Asn Ser Met Ser Ser Lys Tyr Ser Cys Lys Gly Gly Tyr Leu Ser
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<210> 18242

0962460.02800

<211> 2902
<212> DNA
<213> Homo sapiens

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aaaggaaatt aaacatagca tgagtacttt taaaaaatat gaatttaata tagcatctta 240
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<211> 1910
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (42)..(677)

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0052546 0070800

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<210> 18244
<211> 212
<212> PRT
<213> Homo sapiens

<400> 18244

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            20                  25                  30
Phe Arg Asn Gly Ala Val Tyr Gly Ala Lys Ile Arg Ala Pro His Ala
        35                  40                  45
Leu Val Met Thr Phe Leu Phe Arg Asn Gly Ser Leu Gln Glu Lys Leu
    50                  55                  60
Trp Ala Ile Leu Gln Ala Thr Tyr Ile His Ser Trp Asn Leu Ala Arg
65                  70                  75                  80
Phe Val Phe Thr Tyr Lys Gly Leu Arg Ala Leu Gln Ser Tyr Ile Gln
                85                  90                  95
Gly Lys Thr Tyr Pro Ala His Ala Phe Leu Ala Ala Phe Leu Gly Gly
            100                 105                 110
Ile Leu Val Phe Gly Glu Asn Asn Asn Ile Asn Ser Gln Ile Asn Met
        115                 120                 125
Tyr Leu Leu Ser Arg Val Leu Phe Ala Leu Ser Arg Leu Ala Val Glu
    130                 135                 140
Lys Gly Tyr Ile Pro Glu Pro Arg Trp Asp Pro Phe Pro Leu Leu Thr
145                 150                 155                 160
Ala Val Val Trp Gly Leu Val Leu Trp Leu Phe Glu Tyr His Arg Ser
                165                 170                 175
Thr Leu Gln Pro Ser Leu Gln Ser Ser Met Thr Tyr Leu Tyr Glu Asp
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Ser Asn Val Trp His Asp Ile Ser Asp Phe Leu Ile Tyr Asn Lys Ser
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<211> 2145
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (104)..(1855)

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0950450.0012800

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aatcaataag atgagaaatg gacagcattt ctgtgatgtg cagctgcaag ttggacagga 240
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<211> 584
<212> PRT
<213> Homo sapiens

<400> 18246
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0 052 949 A2

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Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
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Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
        50                  55                  60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
65                  70                  75                  80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu Asp Phe Ile Tyr
                85                  90                  95
Thr Gly Ile Val Asn Ile Gly Val Asn Asn Val Gln Glu Leu Ile Ile
            100                 105                 110
Ala Ala Asp Met Leu Gln Leu Thr Glu Val Val His Leu Cys Cys Glu
        115                 120                 125
Phe Leu Lys Gly Gln Ile Asp Pro Leu Asn Cys Ile Gly Ile Phe Gln
    130                 135                 140
Phe Ser Glu Gln Ile Ala Cys His Asp Leu Leu Glu Phe Ser Glu Asn
145                 150                 155                 160
Tyr Ile His Val His Phe Leu Glu Val His Ser Gly Glu Glu Phe Leu
                165                 170                 175
Ala Leu Thr Lys Asp Gln Leu Ile Lys Ile Leu Arg Ser Glu Glu Leu
            180                 185                 190
Ser Ile Glu Asp Glu Tyr Gln Val Phe Leu Ala Ala Met Gln Trp Ile
        195                 200                 205
Leu Lys Asp Leu Gly Lys Arg Arg Lys His Val Val Glu Val Leu Asp
    210                 215                 220
Pro Ile Arg Phe Pro Leu Leu Pro Pro Gln Arg Leu Leu Lys Tyr Ile
225                 230                 235                 240
Glu Gly Val Ser Asp Phe Asn Leu Arg Val Ala Leu Gln Thr Leu Leu
                245                 250                 255
Lys Glu Tyr Cys Glu Val Cys Lys Ser Pro Lys Glu Asn Lys Phe Cys
            260                 265                 270
Ser Phe Leu Gln Thr Ser Lys Val Arg Pro Arg Lys Lys Ala Arg Lys
        275                 280                 285
Tyr Leu Tyr Ala Val Gly Gly Tyr Thr Arg Leu Gln Gly Gly Arg Trp
    290                 295                 300
Ser Asp Ser Arg Ala Leu Ser Cys Val Glu Arg Phe Asp Thr Phe Ser
305                 310                 315                 320
Gln Tyr Trp Thr Thr Val Ser Ser Leu His Gln Ala Arg Ser Gly Leu
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Gly Val Thr Val Leu Gly Gly Met Val Tyr Ala Ile Gly Gly Glu Lys
            340                 345                 350
Asp Ser Met Ile Phe Asp Cys Thr Glu Cys Tyr Asp Pro Val Thr Lys
        355                 360                 365
Gln Trp Thr Thr Val Ala Ser Met Asn His Pro Arg Cys Gly Leu Gly
    370                 375                 380
Val Cys Val Cys Tyr Gly Ala Ile Tyr Ala Leu Gly Gly Trp Val Gly
385                 390                 395                 400
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Cys Glu Met Gln Gly Leu Ile Tyr Val Ile Gly Gly Ile Ser Asn Glu
435 440 445
Gly Ile Glu Leu Arg Ser Phe Glu Val Tyr Asp Pro Leu Ser Lys Arg
450 455 460
Trp Ser Pro Leu Pro Pro Met Gly Thr Arg Arg Ala Tyr Leu Gly Val
465 470 475 480
Ala Ala Leu Asn Asp Cys Ile Tyr Ser Val Gly Gly Trp Asn Glu Thr
485 490 495
Gln Asp Ala Leu His Thr Val Glu Lys Tyr Ser Phe Glu Glu Glu Lys
500 505 510
Trp Val Glu Val Ala Ser Met Lys Val Pro Arg Ala Gly Met Cys Val
515 520 525
Val Ala Val Asn Gly Leu Leu Tyr Val Ser Gly Gly Arg Ser Ser Ser
530 535 540
His Asp Phe Leu Ala Pro Gly Thr Leu Asp Ser Val Glu Val Tyr Asn
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0960469.0002800

<210> 18247
<211> 2214
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (81)..(734)

<400> 18247
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0062456.0002

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<210> 18248
<211> 218
<212> PRT
<213> Homo sapiens

<400> 18248

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Phe Asp Ser Leu Gln Lys Ala Lys Phe Asp Val Ser Gly Leu Thr Thr
         35                  40                  45
Glu Gln Met Leu Arg Lys Asp Gln Lys Thr Ile Tyr Arg Gln Gly Val
     50                  55                  60
Lys Val Ala Ile Ser Ala Ile Tyr Met Asp Leu Glu Ile Cys Glu Val
 65                  70                  75                  80
Leu Glu Arg Ser His Ser Pro Pro Leu Lys Leu Thr Pro Ala Ser Ser
                 85                  90                  95
Thr His Pro Asn Leu His Ala Tyr Leu Gln Gly Asn Thr Gln Val Ser
            100                 105                 110
Arg Lys Lys Leu Leu Pro Leu Leu Gln Glu Ala Leu Ser Ala Tyr Phe
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        115                 120                 125
Asp Ser Met Lys Ile Pro Ser Gly Gln Pro Glu Thr Ala Asp Val Ser
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Arg Glu Gln Val Asp Lys Glu Leu Asp Arg Ala Ser Asn Ser Leu Ile
145                 150                 155                 160
Ser Gly Leu Ser Gln Asp Glu Glu Asp Pro Pro Leu Pro Pro Thr Pro
                165                 170                 175
Met Asn Ser Leu Val Asp Glu Cys Pro Leu Asp Gln Gly Leu Pro Lys
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Leu Ser Ala Glu Ala Val Phe Glu Lys Cys Ser Gln Ile Ser Leu Ser
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Gln Ser Thr Thr Ala Ser Leu Ser Lys Lys
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0592456 - 072800

<210> 18249
<211> 2254
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (205)..(1626)

<400> 18249

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<211> 474
<212> PRT
<213> Homo sapiens

<400> 18250
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35 40 45
Phe Val Ser Gly Asn Ser Asn Glu Cys Leu Gln Asn Ser Gly Phe Glu
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Tyr Thr Ile Cys Phe Leu Pro Pro Leu Val Leu Asn Phe Glu Leu Pro
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Pro Asp Tyr Pro Ser Ser Ser Pro Pro Ser Phe Thr Leu Ser Gly Lys
85 90 95
Trp Leu Ser Pro Thr Gln Leu Ser Ala Leu Cys Lys His Leu Asp Asn
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Leu Trp Glu Glu His Arg Gly Ser Val Val Leu Phe Ala Trp Met Gln
115 120 125
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Ala Ser Pro Asn Thr Glu Leu Asp Phe Gly Gly Ala Ala Gly Ser Asp
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Val Asp Gln Glu Glu Ile Val Asp Glu Arg Ala Val Gln Asp Val Glu
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0050250-0050800

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Val Tyr Cys Lys Ala Cys Leu Lys Asp Tyr Phe Glu Ile Gln Ile Arg
                245                 250                 255
Asp Gly Gln Val Gln Cys Leu Asn Cys Pro Glu Pro Lys Cys Pro Ser
            260                 265                 270
Val Ala Thr Pro Gly Gln Val Lys Glu Leu Val Glu Ala Glu Leu Phe
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Ala Arg Tyr Asp Arg Leu Leu Leu Gln Ser Ser Leu Asp Leu Met Ala
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Asp Val Val Tyr Cys Pro Arg Pro Cys Cys Gln Leu Pro Val Met Gln
305                 310                 315                 320
Glu Pro Gly Cys Thr Met Gly Ile Cys Ser Ser Cys Asn Phe Ala Phe
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Cys Thr Leu Cys Arg Leu Thr Tyr His Gly Val Ser Pro Cys Lys Val
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Thr Ala Glu Lys Leu Met Asp Leu Arg Asn Glu Tyr Leu Gln Ala Asp
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Glu Ala Asn Lys Arg Leu Leu Asp Gln Arg Tyr Gly Lys Arg Val Ile
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Gln Lys Ala Leu Glu Glu Met Glu Ser Lys Glu Trp Leu Glu Lys Asn
385                 390                 395                 400
Ser Lys Ser Cys Pro Cys Cys Gly Thr Pro Ile Glu Lys Leu Asp Gly
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Cys Asn Lys Met Thr Cys Thr Gly Cys Met Gln Tyr Phe Cys Trp Ile
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Cys Met Gly Ser Leu Ser Arg Ala Asn Pro Tyr Lys His Phe Asn Asp
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<210> 18251
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (134)..(1597)

<400> 18251
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<211> 488
<212> PRT
<213> Homo sapiens

<400> 18252
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0950350 .0N8U0

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        50                  55                  60
Phe Glu His Leu Gln Ala Asn Gln His Leu Ala Asn Ile Val Glu Arg
65                  70                  75                  80
Leu Lys Glu Val Lys Leu Ser Pro Asp Asn Gly Lys Lys Arg Asp Leu
                85                  90                  95
Cys Asp His His Gly Glu Lys Leu Leu Leu Phe Cys Lys Glu Asp Arg
            100                 105                 110
Lys Val Ile Cys Trp Leu Cys Glu Arg Ser Gln Glu His Arg Gly His
        115                 120                 125
His Thr Val Leu Thr Glu Glu Val Phe Lys Glu Cys Gln Glu Lys Leu
    130                 135                 140
Gln Ala Val Leu Lys Arg Leu Lys Lys Glu Glu Glu Glu Ala Glu Lys
145                 150                 155                 160
Leu Glu Ala Asp Ile Arg Glu Glu Lys Thr Ser Trp Lys Tyr Gln Val
                165                 170                 175
Gln Thr Glu Arg Gln Arg Ile Gln Thr Glu Phe Asp Gln Leu Arg Ser
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Ile Leu Asn Asn Glu Glu Gln Arg Glu Leu Gln Arg Leu Glu Glu Glu
        195                 200                 205
Glu Lys Lys Thr Leu Asp Lys Phe Ala Glu Ala Glu Asp Glu Leu Val
    210                 215                 220
Gln Gln Lys Gln Leu Val Arg Glu Leu Ile Ser Asp Val Glu Cys Arg
225                 230                 235                 240
Ser Gln Trp Ser Thr Met Glu Leu Leu Gln Asp Met Ser Gly Ile Met
                245                 250                 255
Lys Trp Ser Glu Ile Trp Arg Leu Lys Lys Pro Lys Met Val Ser Lys
            260                 265                 270
Lys Leu Lys Thr Val Phe His Ala Pro Asp Leu Ser Arg Met Leu Gln
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Met Phe Arg Glu Leu Thr Ala Val Arg Cys Tyr Trp Val Asp Val Thr
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Leu Asn Ser Val Asn Leu Asn Leu Asn Leu Val Leu Ser Glu Asp Gln
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Arg Gln Val Ile Ser Val Pro Ile Trp Pro Phe Gln Cys Tyr Asn Tyr
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Gly Val Leu Gly Ser Gln Tyr Phe Ser Ser Gly Lys His Tyr Trp Glu
            340                 345                 350
Val Asp Val Ser Lys Lys Thr Ala Trp Ile Leu Gly Val Tyr Cys Arg
        355                 360                 365
Thr Tyr Ser Arg His Met Lys Tyr Val Val Arg Arg Cys Ala Asn Arg
    370                 375                 380
Gln Asn Leu Tyr Thr Lys Tyr Arg Pro Leu Phe Gly Tyr Trp Val Ile
385                 390                 395                 400
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Val Gly Val Phe Leu Asp Tyr Glu Ala Gly Ile Val Ser Phe Phe Asn
435 440 445
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<211> 2752
<212> DNA
<213> Homo sapiens

<400> 18253
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<211> 2081
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (119)..(1318)

<400> 18254
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Phe Tyr His Ser Glu Asn Pro Lys Tyr Pro Glu Val Gly Asp Leu Arg
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Val Ser Phe Ser Tyr Ala Gly Leu Ser Gly Asp Asp Pro Asp Leu Gly
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Pro Ala His Val Val Thr Val Ile Ala Arg Gln Arg Gly Asp Gln Leu
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    290                 295                 300
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<213> Homo sapiens

<400> 18257

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Cys Pro Leu Tyr His Asn Leu Ser Ala Asp Glu Cys Lys Val Arg Ala
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Asp Asp Asn Asn Arg His Ala Thr Arg His Gln Ala Pro Thr Glu Arg
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Gln Leu Arg Tyr Lys Glu Lys Val Ala Glu Leu Arg Lys Lys Arg Asn
            260                 265                 270
Ser Gly Leu Ser Lys Glu Gln Lys Glu Lys Tyr Met Glu His Arg Gln
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Thr Tyr Gly Asn Thr Arg Glu Pro Leu Leu Glu Asn Leu Thr Ser Glu
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Asp Leu Gly Leu Ile Ser Tyr Arg Ser Tyr Trp Lys Glu Val Leu Leu
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Ala Leu Gln Met Leu Lys Tyr Trp Lys Gly Lys His Leu Val Leu Lys
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Arg Gln Asp Leu Ile Asp Glu Trp Ile Ala Lys Glu Ala Lys Arg Ser
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<210> 18268
<211> 2331
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (27)..(848)

<400> 18268

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<212> PRT
<213> Homo sapiens

<400> 18269
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        35                  40                  45
Cys His Phe Gln Ala Leu Gly Cys Arg Thr Thr His Ser Asn Gln Glu
    50                  55                  60
Val Leu Gln Ser Cys Leu Leu Val Ile Phe Ala Thr Lys Pro His Val
65                  70                  75                  80
Leu Pro Ala Val Leu Ala Glu Val Ala Pro Val Val Thr Thr Glu His
                85                  90                  95
Ile Leu Val Ser Val Ala Ala Gly Val Ser Leu Ser Thr Leu Glu Glu
            100                 105                 110
Leu Leu Pro Pro Asn Thr Arg Val Leu Arg Val Leu Pro Asn Leu Pro
        115                 120                 125
Cys Val Val Gln Glu Gly Ala Ile Val Met Ala Arg Gly Arg His Val
    130                 135                 140
Gly Ser Ser Glu Thr Lys Leu Leu Gln His Leu Leu Glu Ala Cys Gly
145                 150                 155                 160
Arg Cys Glu Glu Val Pro Glu Ala Tyr Val Asp Ile His Thr Gly Leu
                165                 170                 175
Ser Gly Ser Gly Val Ala Phe Val Cys Ala Phe Ser Glu Ala Leu Ala
            180                 185                 190
Glu Gly Ala Val Lys Met Gly Met Pro Ser Ser Leu Ala His Arg Ile
        195                 200                 205
Ala Ala Gln Thr Leu Leu Gly Thr Ala Lys Met Leu Leu His Glu Gly
    210                 215                 220
Gln His Pro Ala Gln Leu Arg Ser Asp Val Cys Thr Pro Gly Gly Thr
225                 230                 235                 240
Thr Ile Tyr Gly Leu His Ala Leu Glu Gln Gly Gly Leu Arg Ala Ala
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<212> DNA
<213> Homo sapiens

<220>
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<222> (397)..(708)

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0960450.0078808

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<210> 18271
<211> 104
<212> PRT
<213> Homo sapiens

<400> 18271
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Lys Gly Ser Arg Ala Gly Glu Val Leu Leu Arg Lys Pro Gln Gly Leu
20 25 30
Asp Arg Met Ala Ser Glu Ser Leu Pro Thr Leu Arg Val Cys Asp Pro

0052950 - 0052800

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Leu Asp Val Ser Ile Gly Ala Gly Phe Leu His Pro Val Leu Ala Val
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Thr Asp Trp Gln Ser Asn Arg Lys Gln Met His Gln Phe Met Phe Phe
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Arg Asn Leu Thr Lys Val Ser Pro
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<211> 2255
<212> DNA
<213> Homo sapiens

<220>
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<222> (52)..(2166)

<400> 18272
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0962345.0728.00

<210> 18273
<211> 705
<212> PRT
<213> Homo sapiens

<400> 18273
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35 40 45
Glu Glu Asp Gln Glu Glu Asp Glu Cys Arg Thr Thr Leu Asn Lys Thr
50 55 60
Met Ile Ser Pro Pro Gln Thr Ala Leu Lys Ser Ala Glu Glu Ile Asn
65 70 75 80
Ser Glu Ala Phe Leu Ala Ser Val Glu Lys Asp Ala Lys Glu Arg Ala
85 90 95
Lys Arg Arg Arg Glu Asn Lys Val Leu Ala Asp Ala Leu Lys Glu Lys
100 105 110
Gly Asn Glu Ala Phe Ala Glu Gly Asn Tyr Glu Thr Ala Ile Leu Arg
115 120 125
Tyr Ser Glu Gly Leu Glu Lys Leu Lys Asp Met Lys Val Leu Tyr Thr
130 135 140
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145 150 155 160
Val Asp Cys Glu Trp Ala Leu Lys Cys Asp Glu Lys Cys Thr Lys Ala
165 170 175
Tyr Phe His Met Gly Lys Ala Asn Leu Ala Leu Lys Asn Tyr Ser Val
180 185 190
Ser Arg Glu Cys Tyr Lys Lys Ile Leu Glu Ile Asn Pro Lys Leu Gln
195 200 205
Thr Gln Val Lys Gly Tyr Leu Asn Gln Val Asp Leu Gln Glu Lys Ala
210 215 220
Asp Leu Gln Glu Lys Glu Ala His Glu Leu Leu Asp Ser Gly Lys Asn

0056456 09/02/2000

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            260                 265                 270
Ile Asn Glu Cys Thr Glu Gln Thr Leu Phe Arg Met His Asn Gly Phe
        275                 280                 285
Ser Ile Ile Ser Asp Asn Glu Val Ile Arg Arg Cys Phe Ser Thr Ala
    290                 295                 300
Gly Asn Asp Ala Val Glu Glu Met Val Cys Val Ser Val Leu Lys Leu
305                 310                 315                 320
Trp Gln Ala Val Cys Ser Arg Asn Glu Glu Asn Gln Arg Val Leu Val
                325                 330                 335
Ile His His Asp Arg Ala Arg Leu Leu Ala Ala Leu Leu Ser Ser Lys
            340                 345                 350
Val Leu Ala Ile Arg Gln Gln Ser Phe Ala Leu Leu Leu His Leu Ala
        355                 360                 365
Gln Thr Glu Ser Gly Arg Ser Leu Ile Ile Asn His Leu Asp Leu Thr
    370                 375                 380
Arg Leu Leu Glu Ala Leu Val Ser Phe Leu Asp Phe Ser Asp Lys Glu
385                 390                 395                 400
Ala Asn Thr Ala Met Gly Leu Phe Thr Asp Leu Ala Leu Glu Glu Arg
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Phe Gln Val Trp Phe Gln Ala Asn Leu Pro Gly Val Leu Pro Ala Leu
            420                 425                 430
Thr Gly Val Leu Lys Thr Asp Pro Lys Val Ser Ser Ser Ser Ala Leu
        435                 440                 445
Cys Gln Cys Ile Ala Ile Met Gly Asn Leu Ser Ala Glu Pro Thr Thr
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Arg Arg His Met Ala Ala Cys Glu Glu Phe Gly Asp Gly Cys Leu Ser
465                 470                 475                 480
Leu Leu Ala Arg Cys Glu Glu Asp Val Asp Leu Phe Arg Glu Val Ile
                485                 490                 495
Tyr Thr Leu Leu Gly Leu Met Met Asn Leu Cys Leu Gln Ala Pro Phe
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Val Ser Glu Val Trp Ala Val Glu Val Ser Arg Arg Cys Leu Ser Leu
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Leu Asn Ser Gln Asp Gly Gly Ile Leu Thr Arg Ala Ala Gly Val Leu
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Ser Arg Thr Leu Ser Ser Ser Leu Lys Ile Val Glu Glu Ala Leu Arg
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Ala Gly Val Val Lys Lys Met Met Lys Phe Leu Lys Thr Gly Gly Glu
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Thr Ala Ser Arg Tyr Ala Ile Lys Ile Leu Ala Ile Cys Thr Asn Ser
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Tyr His Glu Ala Arg Glu Glu Val Ile Arg Leu Asp Lys Lys Leu Ser
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Val Met Met Lys Leu Leu Ser Ser Glu Asp Glu Val Leu Val Gly Asn
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Ser Asp Thr Gln Lys Thr Ala Val Gln Val Asn Ala Gly Ile Ala Leu
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Gly Lys Leu Cys Thr Ala Glu Pro Arg Phe Ala Ala Gln Leu Arg Lys
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Ser
705
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0962945B2 - 07-02-2008

<210> 18274
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (213)..(2078)

<400> 18274

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<210> 18275
<211> 622
<212> PRT
<213> Homo sapiens

<400> 18275

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			20					25					30		
Pro	Tyr	Ser	Ala	Thr	Val	Cys	Ser	Phe	Ile	Glu	Gln	Gln	Phe	Val	Gln
		35					40					45			
Gln	Lys	Gly	Gln	Arg	Phe	Gly	Leu	Gly	Ser	Leu	Ala	His	Ser	Ile	Pro
	50					55					60				
Leu	Gly	Gln	Ala	Asp	Pro	Ser	Leu	Ala	Pro	Tyr	Ile	Ile	Asp	Leu	Pro
65					70					75					80
Ser	Trp	Thr	Gln	Phe	Arg	Gln	Asp	Thr	Gly	Thr	Met	Arg	Ala	Val	Arg
				85					90					95	
Arg	His	Leu	Phe	Pro	Gln	His	Ser	Ala	Pro	Gly	Arg	Gly	Val	Val	Trp
			100					105					110		
Glu	Trp	Leu	Ser	Asp	Asp	Gly	Ser	Trp	Thr	Ala	Tyr	Glu	Ala	Ser	Val
		115					120					125			
Cys	Asp	Tyr	Leu	Glu	Gln	Gln	Val	Ala	Arg	Gly	Asn	Gln	Leu	Val	Asp
	130					135					140				
Leu	Ala	Pro	Leu	Gly	Tyr	Asn	Tyr	Thr	Val	Asn	Tyr	Thr	Thr	His	Thr
145					150					155					160
Gln	Thr	Asn	Lys	Thr	Ser	Ser	Phe	Cys	Arg	Ser	Val	Arg	Arg	Gln	Ala

0068204.0068204.0068204

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Gly Pro Pro Tyr Pro Val Thr Thr Ile Ile Ala Pro Pro Gly His Thr
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Gly Val Ala Cys Ser Cys His Gln Cys Leu Ser Gly Ser Arg Thr Gly
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Pro Val Ser Gly Arg Tyr Arg His Ser Met Thr Asn Leu Pro Ala Tyr
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Pro Val Pro Gln His Pro Pro His Arg Thr Ala Ser Val Phe Gly Thr
225                 230                 235                 240
His Gln Ala Phe Ala Pro Tyr Asn Lys Pro Ser Leu Ser Gly Ala Arg
                245                 250                 255
Ser Ala Pro Arg Leu Asn Thr Thr Asn Ala Trp Gly Ala Ala Pro Pro
            260                 265                 270
Ser Leu Gly Ser Gln Pro Leu Tyr Arg Ser Ser Leu Ser His Leu Gly
        275                 280                 285
Pro Gln His Leu Pro Pro Gly Ser Ser Thr Ser Gly Ala Val Ser Ala
    290                 295                 300
Ser Leu Pro Ser Gly Pro Ser Ser Ser Pro Gly Ser Val Pro Ala Thr
305                 310                 315                 320
Val Pro Met Gln Met Pro Lys Pro Ser Arg Val Gln Gln Ala Leu Ala
                325                 330                 335
Gly Met Thr Ser Val Leu Met Ser Ala Ile Gly Leu Pro Val Cys Leu
            340                 345                 350
Ser Arg Ala Pro Gln Pro Thr Ser Pro Pro Ala Ser Arg Leu Ala Ser
        355                 360                 365
Lys Ser His Gly Ser Val Lys Arg Leu Arg Lys Met Ser Val Lys Gly
    370                 375                 380
Ala Thr Pro Lys Pro Glu Pro Glu Pro Glu Gln Val Ile Lys Asn Tyr
385                 390                 395                 400
Thr Glu Glu Leu Lys Val Pro Pro Asp Glu Asp Cys Ile Ile Cys Met
                405                 410                 415
Glu Lys Leu Ser Ala Ala Ser Gly Tyr Ser Asp Val Thr Asp Ser Lys
            420                 425                 430
Ala Ile Gly Ser Leu Ala Val Gly His Leu Thr Lys Cys Ser His Ala
        435                 440                 445
Phe His Leu Leu Cys Leu Leu Ala Met Tyr Cys Asn Gly Asn Lys Asp
    450                 455                 460
Gly Ser Leu Gln Cys Pro Ser Cys Lys Thr Ile Tyr Gly Glu Lys Thr
465                 470                 475                 480
Gly Thr Gln Pro Gln Gly Lys Met Glu Val Leu Arg Phe Gln Met Ser
                485                 490                 495
Leu Pro Gly His Glu Asp Cys Gly Thr Ile Leu Ile Val Tyr Ser Ile
            500                 505                 510
Pro His Gly Ile Gln Gly Pro Glu His Pro Asn Pro Gly Lys Pro Phe
        515                 520                 525
Thr Ala Arg Gly Phe Pro Arg Gln Cys Tyr Leu Pro Asp Asn Ala Gln
    530                 535                 540
Gly Arg Lys Val Leu Glu Leu Leu Lys Val Ala Trp Lys Arg Arg Leu
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0060450-0760800

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545                 550                 555                 560
Ile Phe Thr Val Gly Thr Ser Ser Thr Thr Gly Glu Thr Asp Thr Val
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Val Trp Asn Glu Ile His His Lys Thr Glu Met Asp Arg Asn Ile Thr
            580                 585                 590
Gly His Gly Tyr Pro Asp Pro Asn Tyr Leu Gln Asn Val Leu Ala Glu
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Leu Ala Ala Gln Gly Val Thr Glu Asp Cys Leu Glu Gln Gln
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<210> 18276
<211> 2210
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1)..(1770)

<400> 18276

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gttcacctgc tgagtcgagg ttatgtactt cctgttgtca gttacatccg aaagtgtctg 1560
gagaagctgg acactgacat ttcactcatt cgctattttg tcactgaggt gctggacgtc 1620
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cagcgtcttg aaaatgggca ccgctgggag gaggtggatg acttctttac aaaggaaaat 1920
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tactgctccc aaatcctgtt ttcagtgttc atttccctca aggcaggcgc tgggctccca 2040
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ctcctttcca agctgacctc agttttctca caagaaccca gttagctgat gttttattgt 2160
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0095295-0095295

<210> 18277
<211> 590
<212> PRT
<213> Homo sapiens

<400> 18277
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Asp Ser Gly Glu Gly Glu Asp Asp Ala Glu Val Gln Gln Glu Cys Leu
35 40 45
His Lys Phe Ser Thr Arg Asp Tyr Ile Met Glu Pro Ser Ile Phe Asn
50 55 60
Thr Leu Lys Arg Tyr Phe Gln Ala Gly Gly Ser Pro Glu Asn Val Ile
65 70 75 80
Gln Leu Leu Ser Glu Asn Tyr Thr Ala Val Ala Gln Thr Val Asn Leu
85 90 95
Leu Ala Glu Trp Leu Ile Gln Thr Gly Val Glu Pro Val Gln Val Gln
100 105 110
Glu Thr Val Glu Asn His Leu Lys Ser Leu Leu Ile Lys His Phe Asp
115 120 125
Pro Arg Lys Ala Asp Ser Ile Phe Thr Glu Glu Gly Glu Thr Pro Ala
130 135 140
Trp Leu Glu Gln Met Ile Ala His Thr Thr Trp Arg Asp Leu Phe Tyr
145 150 155 160
Lys Leu Ala Glu Ala His Pro Asp Cys Leu Met Leu Asn Phe Thr Val
165 170 175
Lys Leu Ile Ser Asp Ala Gly Tyr Gln Gly Glu Ile Thr Ser Val Ser
180 185 190
Thr Ala Cys Gln Gln Leu Glu Val Phe Ser Arg Val Leu Arg Thr Ser
195 200 205
Leu Ala Thr Ile Leu Asp Gly Gly Glu Glu Asn Leu Glu Lys Asn Leu
210 215 220
Pro Glu Phe Ala Lys Met Val Cys His Gly Glu His Thr Tyr Leu Phe
225 230 235 240

0950460-020800

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            260                 265                 270
Gly His Asp Ala Ser Gln Ile Thr Leu Ala Leu Gly Thr Ala Ala Ser
        275                 280                 285
Tyr Pro Arg Ala Cys Gln Ala Leu Gly Ala Met Leu Ser Lys Gly Ala
    290                 295                 300
Leu Ser Pro Ala Asp Ile Thr Val Leu Phe Lys Met Phe Thr Ser Met
305                 310                 315                 320
Asp Pro Pro Pro Val Glu Leu Ile Arg Val Pro Ala Phe Leu Asp Leu
                325                 330                 335
Phe Met Gln Ser Leu Phe Lys Pro Gly Ala Arg Ile Asn Gln Asp His
            340                 345                 350
Lys His Lys Tyr Ile His Ile Leu Ala Tyr Ala Ala Ser Val Val Glu
        355                 360                 365
Thr Trp Lys Lys Asn Lys Arg Val Ser Ile Asn Lys Asp Glu Leu Lys
    370                 375                 380
Ser Thr Ser Lys Ala Val Glu Thr Val His Asn Leu Cys Cys Asn Glu
385                 390                 395                 400
Asn Lys Gly Ala Ser Glu Leu Val Ala Glu Leu Ser Thr Leu Tyr Gln
                405                 410                 415
Cys Ile Arg Phe Pro Val Val Ala Met Gly Val Leu Lys Trp Val Asp
            420                 425                 430
Trp Thr Val Ser Glu Pro Arg Tyr Phe Gln Leu Gln Thr Asp His Thr
        435                 440                 445
Pro Val His Leu Ala Leu Leu Asp Glu Ile Ser Thr Cys His Gln Leu
    450                 455                 460
Leu His Pro Gln Val Leu Gln Leu Leu Val Lys Leu Phe Glu Thr Glu
465                 470                 475                 480
His Ser Gln Leu Asp Val Met Glu Gln Leu Glu Leu Lys Lys Thr Leu
                485                 490                 495
Leu Asp Arg Met Val His Leu Leu Ser Arg Gly Tyr Val Leu Pro Val
            500                 505                 510
Val Ser Tyr Ile Arg Lys Cys Leu Glu Lys Leu Asp Thr Asp Ile Ser
        515                 520                 525
Leu Ile Arg Tyr Phe Val Thr Glu Val Leu Asp Val Ile Ala Pro Pro
    530                 535                 540
Tyr Thr Ser Asp Phe Val Gln Leu Phe Leu Pro Ile Leu Glu Asn Asp
545                 550                 555                 560
Ser Ile Ala Gly Thr Ile Lys Thr Glu Gly Glu His Asp Pro Val Thr
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Glu Phe Ile Ala His Cys Lys Ser Asn Phe Ile Met Val Asn
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<210> 18278
<211> 3033

<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1034)..(1444)

<400> 18278
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gatactgtgc agctcgccaa caaggattaa ttgcaaggac tggtagatcg aatttactga 180
agacttggag ctcgcttctg agaacaaacg caaaaggaca gtaaactgtg gaccttgaag 240
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acagcctccg cctcccgggt tcaagcagtt ctcctgcctc agcctcctga gtagctggga 360
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ccatgttggt cacgctggtc tcaaactccc gacctcaggt gattcactca ccttggtctc 480
ccaaagcgct gggattacag gcatgagcca ccgctatgcc gtctttgttt taagatcttt 540
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tggtgatttg taaaatgccc atccatgagt catggtcccc tgcactctgt gaattttcag 660
gcttctttta aatagattct accctactag atatatccac attttactat cactttacac 720
cattatttag attcttgtat aacagcacct gcacttacac acacacacac acacacacac 780
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caatgaaata aaagaggata caaacaaatg gaagaacatt ccatgctcat gggtaggaag 1200
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<210> 18279
<211> 137
<212> PRT
<213> Homo sapiens

<400> 18279

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Gly Ile Gln Leu Thr Arg Asp Val Lys Asp Leu Phe Lys Glu Asn Tyr
             20                  25                  30
Lys Pro Leu Leu Asn Glu Ile Lys Glu Asp Thr Asn Lys Trp Lys Asn
         35                  40                  45
Ile Pro Cys Ser Trp Val Gly Arg Ile Lys Ile Val Lys Met Ala Ile
     50                  55                  60
Leu Pro Lys Val Ile Tyr Arg Phe Asn Ala Ile Pro Met Lys Leu Pro
 65                  70                  75                  80
Met Thr Phe Phe Thr Glu Leu Glu Thr Thr Thr Leu Lys Phe Ile Trp
                 85                  90                  95
Asn Gln Lys Arg Ala Cys Ile Ala Lys Ser Ile Leu Ser Gln Lys Glu
            100                 105                 110
Lys Ala Gly Gly Ile Thr Leu Pro Asn Phe Lys Leu Tyr Tyr Lys Ala
        115                 120                 125
Ile Val Thr Lys Thr Thr Trp Tyr Trp
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<210> 18280
<211> 2760
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (13)..(1416)

<400> 18280
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<210> 18281
<211> 468
<212> PRT
<213> Homo sapiens

<400> 18281

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            20                  25                  30
Gln Trp Glu Val Gly Gly Trp Arg Trp Trp Gly Leu Ser Arg Ala Phe
        35                  40                  45
Thr Val Lys Pro Glu Gly Arg Asp Ala Gly Glu Val Gly Ala Ser Gly
    50                  55                  60
Ala Pro Ser Pro Pro Leu Ser Gly Leu Gln Ala Val Phe Leu Pro Gln
65                  70                  75                  80
Gly Phe Pro Asp Ser Val Ser Pro Asp Tyr Leu Pro Tyr Gln Leu Trp
                85                  90                  95
Asp Ser Val Gln Ala Phe Ala Ser Ser Leu Ser Gly Ser Leu Ala Thr
            100                 105                 110
Gln Ala Val Leu Leu Gly Ile Gly Val Gly Asn Ala Lys Ala Thr Val
        115                 120                 125
Ser Ala Ala Thr Ala Thr Trp Leu Val Lys Asp Ser Thr Gly Met Leu
    130                 135                 140
Gly Arg Ile Val Phe Ala Trp Trp Lys Gly Ser Lys Leu Asp Cys Asn
145                 150                 155                 160
Ala Lys Gln Trp Arg Leu Phe Ala Asp Ile Leu Asn Asp Val Ala Met
                165                 170                 175
Phe Leu Glu Ile Met Ala Pro Val Tyr Pro Ile Cys Phe Thr Met Thr
            180                 185                 190
Val Ser Thr Ser Asn Leu Ala Lys Cys Ile Val Ser Val Ala Gly Gly
        195                 200                 205
Ala Thr Arg Ala Ala Leu Thr Val His Gln Ala Arg Arg Asn Asn Met
    210                 215                 220
Ala Asp Val Ser Ala Lys Asp Ser Ser Gln Glu Thr Leu Val Asn Leu
225                 230                 235                 240
Ala Gly Leu Leu Val Ser Leu Leu Met Leu Pro Leu Val Ser Gly Cys
                245                 250                 255
Pro Gly Phe Ser Leu Gly Cys Phe Phe Phe Leu Thr Ala Leu His Ile
            260                 265                 270
Tyr Ala Asn Tyr Arg Ala Val Arg Ala Leu Val Met Glu Thr Leu Asn
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Glu Gly Arg Leu Arg Leu Val Leu Lys His Tyr Leu Gln Arg Gly Glu
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Val Leu Asp Pro Thr Ala Ala Asn Arg Met Glu Pro Leu Trp Thr Gly
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Phe Trp Pro Ala Pro Ser Leu Ser Leu Gly Val Pro Leu His Arg Leu
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Ser Tyr Leu Leu Cys Trp Asp Gln Ser Gln Asn Gln Val Gln Val Val
        355                 360                 365
Leu Asn Gln Lys Ala Gly Pro Lys Thr Ile Leu Arg Ala Ala Thr His
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Gly Leu Met Leu Gly Ala Leu Gln Gly Asp Gly Pro Leu Pro Ala Glu
385                 390                 395                 400
Leu Glu Glu Leu Arg Asn Arg Val Arg Ala Gly Pro Lys Lys Glu Ser
                405                 410                 415
Trp Val Val Val Lys Glu Thr His Glu Val Leu Asp Met Leu Phe Pro
            420                 425                 430
Lys Phe Leu Lys Gly Leu Gln Asp Ala Gly Trp Lys Thr Glu Lys His
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<400> 18282

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<400> 18283

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Ala His Tyr Arg Glu Arg Val Lys Ala Met Phe Tyr His Ala Tyr Asp
         35                  40                  45
Ser Tyr Leu Glu Asn Ala Phe Pro Phe Asp Glu Leu Arg Pro Leu Thr
     50                  55                  60
Cys Asp Gly His Asp Thr Trp Gly Ser Phe Ser Leu Thr Leu Ile Asp
 65                  70                  75                  80
Ala Leu Asp Thr Leu Leu Ile Leu Gly Asn Val Ser Glu Phe Gln Arg
                 85                  90                  95
Val Val Glu Val Leu Gln Asp Ser Val Asp Phe Asp Ile Asp Val Asn
            100                 105                 110
Ala Ser Val Phe Glu Thr Asn Ile Arg Val Val Gly Gly Leu Leu Ser
        115                 120                 125
Ala His Leu Leu Ser Lys Lys Ala Gly Val Glu Val Glu Ala Gly Trp
    130                 135                 140
Pro Cys Ser Gly Pro Leu Leu Arg Met Ala Glu Glu Ala Ala Arg Lys
145                 150                 155                 160
Leu Leu Pro Ala Phe Gln Thr Pro Thr Gly Met Pro Tyr Gly Thr Val
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Asn Leu Leu His Gly Val Asn Pro Gly Glu Thr Pro Val Thr Cys Thr
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Ala Gly Ile Gly Thr Phe Ile Val Glu Phe Ala Thr Leu Ser Ser Leu
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Val Leu Thr Gly Lys Trp Val Ala Gln Asp Ala Gly Ile Gly Ala Gly
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Val Asp Ser Tyr Phe Glu Tyr Leu Val Lys Gly Ala Ile Leu Leu Gln
            260                 265                 270
Asp Lys Lys Leu Met Ala Met Phe Leu Glu Tyr Asn Lys Ala Ile Arg
        275                 280                 285
Asn Tyr Thr Arg Phe Asp Asp Trp Tyr Leu Trp Val Gln Met Tyr Lys
    290                 295                 300
Gly Thr Val Ser Met Pro Val Phe Gln Ser Leu Glu Ala Tyr Trp Pro
305                 310                 315                 320
Gly Leu Gln Ser Leu Ile Gly Asp Ile Asp Asn Ala Met Arg Thr Phe
                325                 330                 335
Leu Asn Tyr Tyr Thr Val Trp Lys Gln Phe Gly Gly Leu Pro Glu Phe
            340                 345                 350
Tyr Asn Ile Pro Gln Gly Tyr Thr Val Glu Lys Arg Glu Gly Tyr Pro
        355                 360                 365
Leu Arg Pro Glu Leu Ile Glu Ser Ala Met Tyr Leu Tyr Arg Ala Thr
    370                 375                 380
Gly Asp Pro Thr Leu Leu Glu Leu Gly Arg Asp Ala Val Glu Ser Ile
385                 390                 395                 400
Glu Lys Ile Ser Lys Val Glu Cys Gly Phe Ala Thr Ile Lys Asp Leu
                405                 410                 415
Arg Asp His Lys Leu Asp Asn Arg Met Glu Ser Phe Phe Leu Ala Glu
            420                 425                 430
Thr Val Lys Tyr Leu Tyr Leu Leu Phe Asp Pro Thr Asn Phe Ile His
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Asn Asn Gly Ser Thr Phe Asp Ala Val Ile Thr Pro Tyr Gly Glu Cys
    450                 455                 460
Ile Leu Gly Ala Gly Gly Tyr Ile Phe Asn Thr Glu Ala His Pro Ile
465                 470                 475                 480
Asp Pro Ala Ala Leu His Cys Cys Gln Arg Leu Lys Glu Glu Gln Trp
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Glu Val Glu Asp Leu Met Arg Glu Phe Tyr Ser Leu Lys Arg Ser Arg
            500                 505                 510
Ser Lys Phe Gln Lys Asn Thr Val Ser Ser Gly Pro Trp Glu Pro Pro
        515                 520                 525
Ala Arg Pro Gly Thr Leu Phe Ser Pro Glu Asn His Asp Gln Ala Arg
    530                 535                 540
Glu Arg Lys Pro Ala Lys Gln Lys Val Pro Leu Leu Ser Cys Pro Ser
545                 550                 555                 560
Gln Pro Phe Thr Ser Lys Leu Ala Leu Leu Gly Gln Val Phe Leu Asp
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<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (355)..(1164)

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<212> PRT
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<400> 18285
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35 40 45
Phe Thr Ala Lys Thr Ser Cys Val Arg Arg Arg Tyr Arg Glu Phe Val
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Trp Leu Arg Lys Gln Leu Gln Arg Asn Ala Gly Leu Val Pro Val Pro
65 70 75 80
Glu Leu Pro Gly Lys Ser Thr Phe Phe Gly Thr Ser Asp Glu Phe Ile
85 90 95
Glu Lys Arg Arg Gln Gly Leu Gln His Phe Leu Glu Lys Val Leu Gln
100 105 110
Ser Val Val Leu Leu Ser Asp Ser Gln Leu His Leu Phe Leu Gln Ser
115 120 125
Gln Leu Ser Val Pro Glu Ile Glu Ala Cys Val Gln Gly Arg Ser Thr
130 135 140
Met Thr Val Ser Asp Ala Ile Leu Arg Tyr Ala Met Ser Asn Cys Gly
145 150 155 160
Trp Ala Gln Glu Glu Arg Gln Ser Ser Ser His Leu Ala Lys Gly Asp
165 170 175
Gln Pro Lys Ser Cys Cys Phe Leu Pro Arg Ser Gly Arg Arg Ser Ser
180 185 190
Pro Ser Pro Pro Pro Ser Glu Glu Lys Asp His Leu Glu Val Trp Ala
195 200 205
Pro Val Val Asp Ser Glu Val Pro Ser Leu Glu Ser Pro Thr Leu Pro
210 215 220
Pro Leu Ser Ser Pro Leu Cys Cys Asp Phe Gly Arg Pro Lys Glu Gly
225 230 235 240
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Val Pro Leu Asp Pro Gly Gln Leu Glu Thr Val Leu Glu Lys
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<212> DNA
<213> Homo sapiens

<220>
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<222> (83)..(3100)

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<212> PRT
<213> Homo sapiens

<400> 18287

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Thr Lys Leu Gly Trp Phe Glu Val Gln Lys Asp Gln Phe Val Phe Arg
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Glu Ile Ile Ala Asp Val Lys Lys Phe Leu Gln Gly Thr Val Glu His
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Cys Ile Ile Gly Val Ile Ile Leu Ser Glu Leu Thr Gln Glu Met Asn
 65                  70                  75                  80
Leu Val Asp Tyr Ser Arg Pro Ser Ala Lys His Arg Lys Ile Ala Thr
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Ser Phe Arg Asp Thr Ser Leu Lys Asp Val Leu Val Leu Ala Cys Ser
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Leu Leu Lys Glu Ala Phe Ala Lys Pro Leu Asn Leu Gln Asp Gln Cys
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180 185 190
Leu Ser Gln Leu Ala Leu Ser Cys Leu Val Gln Phe Ala Ser Thr Arg
195 200 205
Arg Ser Leu Phe Asn Ser Pro Glu Arg Ala Lys Tyr Leu Gly Asn Leu
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Ile Lys Gly Val Lys Arg Ile Leu Glu Asn Pro Gln Gly Leu Ser Asp
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Pro Gly Asn Tyr His Glu Phe Cys Arg Phe Leu Ala Arg Leu Lys Thr
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Asn Tyr Gln Leu Gly Glu Leu Val Met Val Lys Glu Tyr Pro Glu Val
260 265 270
Ile Arg Leu Ile Ala Asn Phe Thr Ile Thr Ser Leu Gln His Trp Glu
275 280 285
Phe Ala Pro Asn Ser Val His Tyr Leu Leu Thr Leu Trp Gln Arg Met
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340 345 350
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355 360 365
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370 375 380
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385 390 395 400
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420 425 430
His Asp Ala Met Asp Gly Glu Leu Ser Cys Arg Val Phe Gln Leu Ile
435 440 445
Ser Leu Met Asp Thr Gly Leu Pro Arg Cys Cys Asn Glu Lys Ile Glu
450 455 460
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465 470 475 480
Asp Gln Leu Gln Arg Thr Ser Lys Val Tyr Ala Arg Met Ser Glu Val
485 490 495
Leu Gly Ile Thr Asp Asp Asn His Val Leu Glu Thr Phe Met Thr Lys
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Lys Lys Leu Val Lys Ile Asp Ala Val Lys Phe Met Leu Lys Asn His
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965 970 975
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<212> PRT
<213> Homo sapiens

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Met Ser Gln Leu Val Leu Pro Cys His Thr Asn Gln Arg Gly Glu Leu
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Ser Val Gly Gln Leu Leu Lys Trp Ile Asp Thr Thr Ala Cys Leu Ser
65 70 75 80
Ala Glu Arg His Ala Gly Cys Pro Cys Val Thr Ala Ser Met Asp Asp
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Ile Tyr Phe Glu His Thr Ile Ser Val Gly Gln Val Val Asn Ile Lys
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0080290 - 0080290

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Lys Gln Ile Thr Pro Arg Thr Glu Glu Glu Lys Met Glu His Ser Val
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Ala Ala Glu Arg Arg Arg Met Arg Leu Val Tyr Ala Asp Thr Ile Lys
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Asp Leu Leu Ala Asn Cys Ala Ile Gln Gly Asp Leu Glu Ser Arg Asp
        195                 200                 205
Cys Ser Arg Met Val Pro Ala Glu Lys Thr Arg Val Glu Ser Val Glu
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Leu Val Leu Pro Pro His Ala Asn His Gln Gly Asn Thr Phe Gly Gly
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Gln Ile Met Ala Trp Met Glu Asn Val Ala Thr Ile Ala Ala Ser Arg
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Arg Gly Pro Ser Gln Val Gly Asp Arg Leu Val Leu Lys Ala Ile Val
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His Val Asp Ala Ala Gln Ala Phe Leu Leu Leu Ser Asp Leu Arg Gln
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Gly His Thr Lys Pro Gln Asp Phe Val Ile Leu Ala Ser Arg Arg Lys
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<213> Homo sapiens

<400> 18292

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Val Gln Ser Gly Gly Glu Glu Ala Asn Leu Leu Leu Pro Glu Leu Gly
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Thr Ile Tyr Ser Ala Thr Lys Thr Phe Val Asp Phe Phe Ser Gln Cys
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Pro Tyr Phe Val Ala Thr Lys Leu Ala Lys Ile Arg Lys Pro Thr Leu

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<400> 18297

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<400> 18299
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50 55 60
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Leu Glu Arg Ala Cys Arg Val Ala Glu Gln Ala Ala Asn Asp Leu Arg
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Lys Leu Arg Leu Glu Val Thr Val Gln Ala Leu Lys Thr Gln His Glu
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145 150 155 160
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165 170 175
Lys Gln Arg Thr Leu Ala Val Ala Ala Arg Lys Lys Leu Glu Gly Glu
180 185 190
Leu Glu Glu Leu Lys Ala Gln Met Ala Ser Ala Gly Gln Gly Lys Glu
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225 230 235 240
Gln Asn Arg Glu Ser Glu Lys Arg Leu Lys Gly Leu Glu Ala Glu Val

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Leu Ser Lys Ala Ala Ile Leu Glu Glu Lys Arg Gln Leu Glu Gly Arg
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Leu Gly Gln Leu Glu Glu Glu Leu Glu Glu Glu Gln Ser Asn Ser Glu
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Leu Leu Asn Asp Arg Tyr Arg Lys Leu Leu Leu Gln Val Glu Ser Leu
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Thr Thr Glu Leu Ser Ala Glu Arg Ser Phe Ser Ala Lys Ala Glu Ser
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Ala Leu Glu Ser Lys Leu Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu
385                 390                 395                 400
Thr Arg Glu Arg Ile Leu Ser Gly Lys Leu Val Arg Arg Ala Glu Lys
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Arg Leu Lys Glu Val Val Leu Gln Val Glu Glu Glu Arg Arg Val Ala
            420                 425                 430
Asp Gln Leu Arg Asp Gln Leu Glu Lys Gly Asn Leu Arg Val Lys Gln
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Leu Lys Arg Gln Leu Glu Glu Ala Glu Glu Glu Ala Ser Arg Ala Gln
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Ala Gly Arg Arg Arg Leu Gln Arg Glu Leu Glu Asp Val Thr Glu Ser
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Ala Glu Ser Met Asn Arg Glu Val Thr Thr Leu Arg Asn Arg Leu Arg
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Arg Gly Pro Leu Thr Phe Thr Thr Arg Thr Val Arg Gln Val Phe Arg
            500                 505                 510
Leu Glu Glu Gly Val Ala Ser Asp Glu Glu Ala Glu Glu Ala Gln Pro
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<210> 18300
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS

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<222> (906)..(1274)

<400> 18300
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<210> 18301
<211> 123

<212> PRT
<213> Homo sapiens

<400> 18301

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Leu Arg Ser His His Cys Ala Pro Ala Trp Gly Thr Arg Val Arg Leu
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Arg Leu Gln Lys Lys Lys Lys Lys Glu Lys Glu Asn Met Gly Lys Arg
    50                  55                  60
Ile Thr Ser Lys Lys Ile Lys Leu Pro Ile Lys Ser Ser Gln His Arg
65                  70                  75                  80
Asn Thr Leu Asp Trp Met Ala Pro Pro Val Asn Ser Thr Arg His Leu
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<210> 18302
<211> 2792
<212> DNA
<213> Homo sapiens

<400> 18302

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<210> 18303
<211> 2276
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (190)..(792)

<400> 18303
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gaggagccga tgccaactaa agagacgggc tgggcttctt tttcagagtt cacgtcttcc 360
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<210> 18304
<211> 201
<212> PRT
<213> Homo sapiens

<400> 18304
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20 25 30
Asp Val Trp Ser Thr Glu Glu Pro Met Pro Thr Lys Glu Thr Gly Trp
35 40 45
Ala Ser Phe Ser Glu Phe Thr Ser Ser Leu Ser Thr Lys Asp Ser Leu
50 55 60
Arg Ser Asn Ser Pro Val Glu Met Glu Thr Ser Thr Glu Pro Met Asp
65 70 75 80
Pro Leu Thr Pro Ser Ala Ala Ala Leu Ala Val Gln Pro Glu Ala Ala

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            100                 105                 110
Ser Thr Asp Lys Val Thr Glu Thr Val Met Asn Gly Gly Met Lys Glu
        115                 120                 125
Thr Leu Ser Leu Thr Val Asp Ala Lys Thr Glu Thr Ala Val Phe Lys
    130                 135                 140
Ser Glu Glu Gly Lys Leu Ser Thr Ser Gln Asp Ala Ala Cys Lys Asp
145                 150                 155                 160
Ala Glu Glu Cys Pro Glu Thr Ala Glu Ala Lys Cys Ala Ala Pro Arg
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Pro Pro Ser Ser Ser Pro Glu Gln Arg Thr Gly Gln Pro Ser Ala Pro
            180                 185                 190
Gly Asp Thr Ser Val Asn Gly Pro Val
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<211> 2023
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (9)..(1154)

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<210> 18306
<211> 382
<212> PRT
<213> Homo sapiens

<400> 18306
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35 40 45
Ile Lys Asp Leu Asp Val Phe Ala Arg Thr Gln Glu Val Lys Val Asp
50 55 60
Pro Asp Lys Pro Leu Glu Gly Val Arg Leu Leu Val Leu Gln Ser Lys
65 70 75 80
Lys Thr Leu Leu Val Pro Thr Pro Arg Leu Arg Thr Gly Leu Phe Asn
85 90 95
Lys Ile Thr Pro Pro Pro Gly Ala Thr Lys Asp Ile Leu Arg Lys Cys
100 105 110
Ala Thr Ser Gln Gly Val Arg Asn Tyr Ser Val Pro Ile Gly Leu Asp
115 120 125
Ser Arg Val Leu Val Asp Leu Val Val Val Gly Ser Val Ala Val Ser
130 135 140
Glu Lys Gly Trp Arg Ile Gly Lys Gly Glu Gly Tyr Ala Asp Leu Glu
145 150 155 160
Tyr Ala Met Met Val Ser Met Gly Ala Val Ser Lys Glu Thr Pro Val
165 170 175
Val Thr Ile Val His Asp Cys Gln Val Val Asp Ile Pro Glu Glu Leu
180 185 190
Val Glu Glu His Asp Ile Thr Val Asp Tyr Ile Leu Thr Pro Thr Arg
195 200 205
Val Ile Ala Thr Gly Cys Lys Arg Pro Lys Pro Met Gly Ile Thr Trp

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Glu His Gln His Leu Pro Glu Pro Gly Cys Gln Gln Thr Val Pro Leu
            260                 265                 270
Ser Val Gly Arg Arg Pro Pro Asp Thr Pro Gly Pro Glu Thr Asn Ser
        275                 280                 285
Met Glu Ala Ala Pro Gly Ser Pro Pro Gly Glu Gly Ala Pro Leu Ala
    290                 295                 300
Ala Asp Val Tyr Val Gly Asn Leu Pro Arg Asp Ala Arg Val Ser Asp
305                 310                 315                 320
Leu Lys Arg Ala Leu Arg Glu Leu Gly Ser Val Pro Leu Arg Leu Thr
                325                 330                 335
Trp Gln Gly Pro Arg Arg Arg Ala Phe Leu His Tyr Pro Asp Ser Ala
            340                 345                 350
Ala Ala Gln Gln Ala Val Ser Cys Leu Gln Gly Leu Arg Leu Gly Thr
        355                 360                 365
Asp Thr Leu Arg Val Ala Leu Ala Arg Gln Gln Arg Asp Lys
    370                 375                 380
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<210> 18307
<211> 2255
<212> DNA
<213> Homo sapiens

<400> 18307

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<212> PRT
<213> Homo sapiens

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35 40 45
Tyr Phe Ser Ala Glu Asp Ala Glu Ile Val Cys Ala Cys Pro Thr Gln
50 55 60
Pro Asp Lys Val Arg Lys Ile Leu Asp Leu Val Gln Ser Lys Gly Glu
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Glu Val Ser Glu Phe Phe Leu Tyr Leu Leu Gln Gln Leu Ala Asp Ala
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Leu Leu Thr Gln Ser Lys Val Val Val Asn Thr Asp Pro Val Ser Arg

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Leu Cys Tyr Ala Gln Lys Glu Glu Leu Leu Leu Glu Glu Ile Tyr Met
145                 150                 155                 160
Asp Thr Ile Met Glu Leu Val Gly Phe Ser Asn Glu Ser Leu Gly Ser
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Leu Asn Ser Leu Ala Cys Leu Leu Asp His Thr Thr Gly Ile Leu Asn
            180                 185                 190
Glu Gln Gly Glu Thr Ile Phe Ile Leu Gly Asp Ala Gly Val Gly Lys
        195                 200                 205
Ser Met Leu Leu Gln Arg Leu Gln Ser Leu Trp Ala Thr Gly Arg Leu
    210                 215                 220
Asp Ala Gly Val Lys Phe Phe Phe His Phe Arg Cys Arg Met Phe Ser
225                 230                 235                 240
Cys Phe Lys Glu Ser Asp Arg Leu Cys Leu Gln Asp Leu Leu Phe Lys
                245                 250                 255
His Tyr Cys Tyr Pro Glu Arg Asp Pro Glu Glu Val Phe Ala Phe Leu
            260                 265                 270
Leu Arg Phe Pro His Val Ala Leu Phe Thr Phe Asp Gly Leu Asp Glu
        275                 280                 285
Leu His Ser Asp Leu Asp Leu Ser Arg Val Pro Asp Ser Ser Cys Pro
    290                 295                 300
Trp Glu Pro Ala His Pro Leu Val Leu Leu Ala Asn Leu Leu Ser Gly
305                 310                 315                 320
Lys Leu Leu Lys Gly Ala Ser Lys Leu Leu Thr Ala Arg Thr Gly Ile
                325                 330                 335
Glu Val Pro Arg Gln Phe Leu Arg Lys Lys Val Leu Leu Arg Gly Phe
            340                 345                 350
Ser Pro Ser His Leu Arg Ala Tyr Ala Arg Arg Met Phe Pro Glu Arg
        355                 360                 365
Ala Leu Gln Asp Arg Leu Leu Ser Gln Leu Glu Ala Asn Pro Asn Leu
    370                 375                 380
Cys Ser Leu Cys Ser Val Pro Leu Phe Cys Trp Ile Ile Phe Arg Cys
385                 390                 395                 400
Phe Gln His Phe Arg Ala Ala Phe Glu Gly Ser Pro Gln Leu Pro Asp
                405                 410                 415
Cys Thr Met Thr Leu Thr Asp Val Phe Leu Leu Val Thr Glu Val His
            420                 425                 430
Leu Asn Arg Met Gln Pro Ser Ser Leu Val Gln Arg Asn Thr Arg Ser
        435                 440                 445
Pro Val Glu Thr Leu His Ala Gly Arg Asp Thr Leu Cys Ser Leu Gly
    450                 455                 460
Gln Val Ala His Arg Gly Met Glu Lys Ser Leu Phe Val Phe Thr Gln
465                 470                 475                 480
Glu Glu Val Gln Ala Ser Gly Leu Gln Glu Arg Asp Met Gln Leu Gly
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Phe Leu Arg Ala Leu Pro Glu Leu Gly Pro Gly Gly Asp Gln Gln Ser
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Gln Glu Trp Met Pro Pro Ala Gly Ala Ala Thr Thr Ser Cys Tyr Pro
545                 550                 555                 560
Pro Phe Leu Pro Phe Gln Cys Leu Gln Gly Ser Gly Pro Ala Arg Glu
                565                 570                 575
Asp Leu Phe Lys Asn Lys Asp His Phe Gln Phe Thr Asn Leu Phe Leu
            580                 585                 590
Cys Gly Leu Leu Ser Lys Ala Lys Gln Lys Leu Leu Arg His Leu Val
        595                 600                 605
Pro Ala Ala Ala Leu Arg Arg Lys Arg Lys Ala Leu Trp Ala His Leu
    610                 615                 620
Phe Ser Ser Leu Arg Gly Tyr Leu Lys Ser Leu Pro Arg Val Gln Val
625                 630                 635                 640
Glu Ser Phe Asn Gln Val Gln Ala Met Pro Thr Phe Ile Trp Met Leu
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Arg Cys Ile Tyr Glu Thr Gln Ser Gln Lys Val Gly Gln Leu Ala Ala
            660                 665                 670
Arg Gly Ile Cys Ala Asn Tyr Leu Lys Leu Thr Tyr Cys Asn Ala Cys
        675                 680                 685
Ser Ala Asp Cys Ser Ala Leu Ser Phe Val Leu His His Phe Pro Lys
    690                 695                 700
Arg Leu Ala Leu Asp Leu Asp Asn Asn Asn Leu Asn Asp Tyr Gly Val
705                 710                 715                 720
Arg Glu Leu Gln Pro Cys Phe Ser Arg Leu Thr Val Leu Arg Leu Ser
                725                 730                 735
Val Asn Gln Ile Thr Asp Gly Gly Val Lys Val Leu Ser Glu Glu Leu
            740                 745                 750
Thr Lys Tyr Lys Ile Val Thr Tyr Leu Gly Leu Trp Lys Ser Val Asp
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Pro Glu Leu Gly Lys Ile Ile Ser Asp Asn Leu Thr Tyr Cys Lys Cys
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Leu Gln Lys Val Gly Asp Arg Lys Asn Tyr Ala Ser Ala Lys Leu Ser
145                 150                 155                 160
Glu Leu Leu Pro Glu Glu Val Glu Ala Glu Val Lys Ala Ala Ala Glu
                165                 170                 175
Ile Ser Met Gly Thr Glu Val Ser Glu Glu Asp Ile Cys Asn Ile Leu
            180                 185                 190
His Leu Cys Thr Gln Val Ile Glu Ile Ser Glu Tyr Arg Thr Gln Leu
        195                 200                 205
Tyr Glu Tyr Leu Gln Asn Arg Met Met Ala Ile Ala Pro Asn Val Thr
    210                 215                 220
Val Thr Val Gly Glu Leu Val Gly Ala Arg Leu Ile Ala His Ala Gly
225                 230                 235                 240
Ser Leu Leu Asn Leu Ala Lys His Ala Ala Ser Thr Val Gln Ile Leu
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Gly Ala Glu Lys Ala Leu Phe Arg Ala Leu Lys Ser Arg Arg Asp Thr
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Pro Lys Tyr Gly Leu Ile Tyr His Ala Ser Leu Val Gly Gln Thr Ser
        275                 280                 285
Pro Lys His Lys Gly Lys Ile Ser Arg Met Leu Ala Ala Lys Thr Val
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Leu Ala Ile Arg Tyr Asp Ala Phe Gly Glu Asp Ser Ser Ser Ala Met
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Gly Val Glu Asn Arg Ala Lys Leu Glu Ala Arg Leu Arg Thr Leu Glu
                325                 330                 335
Asp Arg Gly Ile Arg Lys Ile Ser Gly Thr Gly Lys Ala Leu Ala Lys
            340                 345                 350
Thr Glu Lys Tyr Glu His Lys Ser Glu Val Lys Thr Tyr Asp Pro Ser
        355                 360                 365
Gly Asp Ser Thr Leu Pro Thr Cys Ser Lys Lys Arg Lys Ile Glu Gln
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Val Asp Lys Glu Asp Glu Ile Thr Glu Lys Lys Ala Lys Lys Ala Lys
385                 390                 395                 400
Ile Lys Val Lys Val Glu Glu Glu Glu Glu Glu Lys Val Ala Glu Glu
                405                 410                 415
Glu Glu Thr Ser Val Lys Lys Lys Lys Lys Arg Gly Lys Lys Lys His
            420                 425                 430
Ile Lys Glu Glu Pro Leu Ser Glu Glu Glu Pro Cys Thr Ser Thr Ala
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<211> 842
<212> PRT
<213> Homo sapiens

<400> 18317

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             20                  25                  30
Gln Gln Leu Leu Gln Leu Gln Gln Leu Leu Gln Gln Ser Pro Pro Gln
         35                  40                  45
Ala Pro Leu Pro Met Ala Val Ser Arg Gly Leu Pro Pro Gln Gln Pro
     50                  55                  60
Gln Gln Pro Leu Leu Asn Leu Gln Gly Thr Asn Ser Ala Ser Leu Leu
 65                  70                  75                  80
Asn Gly Ser Met Leu Gln Arg Ala Leu Leu Leu Gln Gln Leu Gln Gly
                 85                  90                  95
Leu Asp Gln Phe Val Met Pro Pro Ala Thr Tyr Asp Thr Ala Gly Leu
            100                 105                 110
Thr Met Pro Thr Ala Thr Leu Gly Asn Leu Arg Gly Tyr Gly Met Ala
        115                 120                 125
Ser Pro Gly Leu Ala Ala Pro Ser Leu Thr Pro Pro Gln Leu Ala Thr
    130                 135                 140
Pro Asn Leu Gln Gln Phe Phe Pro Gln Ala Thr Arg Gln Ser Leu Leu
145                 150                 155                 160
Gly Pro Pro Pro Val Gly Val Pro Met Asn Pro Ser Gln Phe Asn Leu
                165                 170                 175
Ser Gly Arg Asn Pro Gln Lys Gln Ala Arg Thr Ser Ser Ser Thr Thr
            180                 185                 190
Pro Asn Arg Lys Asp Ser Ser Ser Gln Thr Met Pro Val Glu Asp Lys
        195                 200                 205
Ser Asp Pro Pro Glu Gly Ser Glu Glu Ala Ala Glu Pro Arg Met Asp
    210                 215                 220
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Glu Lys Arg Thr Pro Ala Pro Glu Pro Glu Pro Cys Glu Ala Ser Glu
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Leu Pro Ala Lys Arg Leu Arg Ser Ser Glu Glu Pro Thr Glu Lys Glu
260 265 270
Pro Pro Gly Gln Leu Gln Val Lys Ala Gln Pro Gln Ala Arg Met Thr
275 280 285
Val Pro Lys Gln Thr Gln Thr Pro Asp Leu Leu Pro Glu Ala Leu Glu
290 295 300
Ala Gln Val Leu Pro Arg Phe Gln Pro Arg Val Leu Gln Val Gln Ala
305 310 315 320
Gln Val Gln Ser Gln Thr Gln Pro Arg Ile Pro Ser Thr Asp Thr Gln
325 330 335
Val Gln Pro Lys Leu Gln Lys Gln Ala Gln Thr Gln Thr Ser Pro Glu
340 345 350
His Leu Val Leu Gln Gln Lys Gln Val Gln Pro Gln Leu Gln Gln Glu
355 360 365
Ala Glu Pro Gln Lys Gln Val Gln Pro Gln Val His Thr Gln Ala Gln
370 375 380
Pro Ser Val Gln Pro Gln Glu His Pro Pro Ala Gln Val Ser Val Gln
385 390 395 400
Pro Pro Glu Gln Thr His Glu Gln Pro His Thr Gln Pro Gln Val Ser
405 410 415
Leu Leu Ala Pro Glu Gln Thr Pro Val Val Val His Val Cys Gly Leu
420 425 430
Glu Met Pro Pro Asp Ala Val Glu Ala Gly Gly Gly Met Glu Lys Thr
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Leu Pro Glu Pro Val Gly Thr Gln Val Ser Met Glu Glu Ile Gln Asn
450 455 460
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Val Pro Arg Pro Ser Asp Ser Val Ser Ser Thr Pro Ala Ala Thr Ser
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Thr Pro Ser Lys Gln Ala Leu Gln Phe Phe Cys Tyr Ile Cys Lys Ala
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545 550 555 560
His Gln Gln Arg Leu Gly Glu Ile Gln His Met Ser Gln Ala Cys Leu
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595 600 605

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Gly Asp Leu Ile Gln His Arg Arg Thr Gln Asp His Lys Val Ala Lys
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Ala Lys Glu Leu Lys Ser Leu Glu Lys Glu Ile Ala Gly Gln Asp Glu
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Glu Glu Glu Glu Asp Asp Glu Asp Glu Glu Glu Ile Lys Val Glu Glu
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Glu Leu Cys Lys Gln Val Arg Ser Arg Asp Ile Ser Arg Glu Glu Trp
705                 710                 715                 720
Lys Gly Ser Glu Thr Tyr Ser Pro Asn Thr Ala Tyr Gly Val Asp Phe
                725                 730                 735
Leu Val Pro Val Met Gly Tyr Ile Cys Arg Ile Cys His Lys Phe Tyr
            740                 745                 750
His Ser Asn Ser Gly Ala Gln Leu Ser His Cys Lys Ser Leu Gly His
        755                 760                 765
Phe Glu Asn Leu Gln Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr
    770                 775                 780
Thr Arg Pro Val Ser Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu
785                 790                 795                 800
Thr Ala Leu Phe Thr Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr
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Gln Asp Lys Thr Pro Ser Lys Val Thr Ala Arg Pro Ser Gln Pro Pro
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Leu Pro Arg Arg Ser Thr Arg Leu Lys Thr
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<212> DNA
<213> Homo sapiens

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<212> PRT
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Lys His Ser Thr Ile Tyr Pro Ser Pro Glu Glu Leu Glu Ala Val Gln

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                20                  25                  30
Asn Met Val Ser Thr Val Glu Cys Ala Leu Lys His Val Ser Asp Trp
            35                  40                  45
Leu Asp Glu Thr Asn Lys Gly Thr Lys Thr Glu Gly Glu Thr Glu Val
        50                  55                  60
Lys Lys Asp Glu Ala Gly Glu Asn Tyr Ser Lys Asp Gln Gly Gly Arg
65                  70                  75                  80
Thr Leu Cys Gly Val Met Arg Ile Gly Leu Val Ala Lys Gly Leu Leu
                85                  90                  95
Ile Lys Asp Asp Met Asp Leu Glu Leu Val Leu Met Cys Lys Asp Lys
            100                 105                 110
Pro Thr Glu Thr Leu Leu Asn Thr Val Lys Asp Asn Leu Pro Ile Gln
        115                 120                 125
Ile Gln Lys Leu Thr Glu Glu Lys Tyr Gln Val Glu Gln Cys Val Asn
    130                 135                 140
Glu Ala Ser Ile Ile Ile Arg Asn Thr Lys Glu Pro Thr Leu Thr Leu
145                 150                 155                 160
Lys Val Ile Leu Thr Ser Pro Leu Ile Arg Asp Glu Leu Glu Lys Lys
                165                 170                 175
Asp Gly Glu Asn Val Ser Met Lys Asp Pro Pro Asp Leu Leu Asp Arg
            180                 185                 190
Gln Lys Cys Leu Asn Ala Leu Ala Ser Leu Arg His Ala Lys Trp Phe
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Gln Ala Arg Ala Asn Gly Leu Lys Ser Cys Val Ile Val Leu Arg Ile
    210                 215                 220
Leu Arg Asp Leu Cys Asn Arg Val Pro Thr Trp Ala Pro Leu Lys Gly
225                 230                 235                 240
Trp Pro Leu Glu Leu Ile Cys Glu Lys Ser Ile Gly Thr Cys Asn Arg
                245                 250                 255
Pro Leu Gly Ala Gly Glu Ala Leu Arg Arg Val Met Glu Cys Leu Ala
            260                 265                 270
Ser Gly Ile Leu Leu Pro Gly Gly Pro Gly Leu His Asp Pro Cys Glu
        275                 280                 285
Arg Asp Pro Thr Asp Ala Leu Ser Tyr Met Thr Ile Gln Gln Lys Glu
    290                 295                 300
Asp Ile Thr His Ser Ala Gln His Ala Leu Arg Leu Ser Ala Phe Gly
305                 310                 315                 320
Gln Ile Tyr Lys Val Leu Glu Met Asp Pro Leu Pro Ser Ser Lys Pro
                325                 330                 335
Phe Gln Lys Tyr Ser Trp Ser Val Thr Asp Lys Glu Gly Ala Gly Ser
            340                 345                 350
Ser Ala Leu Lys Arg Pro Phe Glu Asp Gly Leu Gly Asp Asp Lys Asp
        355                 360                 365
Pro Asn Lys Lys Met Lys Arg Asn Leu Arg Lys Ile Leu Asp Ser Lys
    370                 375                 380
Ala Ile Asp Leu Met Asn Ala Leu Met Arg Leu Asn Gln Ile Arg Pro
385                 390                 395                 400
Gly Leu Gln Tyr Lys Leu Leu Ser Gln Ser Gly Pro Val His Ala Pro
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0962460.0702800

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                405                 410                 415
Val Phe Thr Met Ser Val Asp Val Asp Gly Thr Thr Tyr Glu Ala Ser
            420                 425                 430
Gly Pro Ser Lys Lys Thr Ala Lys Leu His Val Ala Val Lys Val Leu
        435                 440                 445
Gln Ala Met Gly Tyr Pro Thr Gly Phe Asp Ala Asp Ile Glu Cys Met
    450                 455                 460
Ser Ser Asp Glu Lys Ser Asp Asn Glu Ser Lys Asn Glu Thr Val Ser
465                 470                 475                 480
Ser Asn Ser Ser Asn Asn Thr Gly Asn Ser Thr Thr Glu Thr Ser Ser
                485                 490                 495
Thr Leu Glu Val Arg Thr Gln Gly Pro Ile Leu Thr Ala Ser Gly Lys
            500                 505                 510
Asn Pro Val Met Glu Leu Asn Glu Lys Arg Arg Gly Leu Lys Tyr Glu
        515                 520                 525
Leu Ile Ser Glu Thr Gly Gly Ser His Asp Lys Arg Phe Val Met Glu
    530                 535                 540
Val Glu Val Asp Gly Gln Lys Phe Arg Gly Ala Gly Pro Asn Lys Lys
545                 550                 555                 560
Val Ala Lys Ala Ser Ala Ala Leu Ala Ala Leu Glu Lys Leu Phe Ser
                565                 570                 575
Gly Pro Asn Ala Ala Asn Asn Lys Lys Lys Lys Ile Ile Pro Gln Ala
            580                 585                 590
Lys Gly Val Val Asn Thr Ala Val Ser Ala Ala Val Gln Ala Val Arg
        595                 600                 605
Gly Arg Gly Arg Gly Thr Leu Thr Arg Gly Ala Phe Val Gly Ala Thr
    610                 615                 620
Ala Ala Pro Gly Tyr Ile Ala Pro Gly Tyr Gly Thr Pro Tyr Gly Tyr
625                 630                 635                 640
Ser Thr Ala Ala Pro Ala Tyr Gly Leu Pro Lys Arg Met Val Leu Leu
                645                 650                 655
Pro Val Met Lys Phe Pro Thr Tyr Pro Val Pro His Tyr Ser Phe Phe
            660                 665                 670
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0952469-0702800

<210> 18320
<211> 1719
<212> DNA
<213> Homo sapiens

<400> 18320
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tcagggattt gggatgaagt gaagaggtca aattactttt tagaagaagg gaatctaaaa 180
accatctctc ctaaacaaat ggtagactgg ctttacttaa gggatatttg tctttatagg 240
agtacataaa tttatcttaa tgatatttaa gtagtttttt ttttttttt ttgggacgaa 300
gttttgctct tgttgcccag gctgtatcgc aatggcgcgg tctctgctca ctgcagcatc 360
cgcctcccgg gttcgggcgg ttctcctgcc tcagcctccc gagtagctgg gattacaggc 420

gcccgccacc acacccagct aatttttttgt atatttggta gagacggggt ttcaccgtgt 480
tgaccaggct ggtctcgagc ttctggcctc aggtgatcca cctgcctcag cctcccaaat 540
tgctgggatt gcaggcgtga gccaccttgc ccagccaatt ttttttaaa gagacatggt 600
cttgctatgt tgcccaggtt ggtcttgaac tcctggcctc aagagatccc cccaaccttg 660
gcctccaaag tgctgggatt acaggcatga gccaccgcgc ctggcctcaa gtaagttttt 720
ataccatgat aggggaaaac ctggaaggct aagagatgtg ctgttttcct tcatgggacc 780
ccactttcca cagtaaacaa ctggtataat catttattac gttgtatgca aattttgcct 840
tagacaacat ttgtctggtt ccttattaat aacttgcatc tgatctgctt agagttgctt 900
aattataagt aaatataatc ccagtagcat ttagccttaa tctcaagagt tcaaaatgtt 960
taacacattc tacctgacgg gaggtggtga cctcattcag tcggttaaga gcctgagccc 1020
tgtgaagtta aacacctgct catggtcaca tagcccaggc agaagaaaat ctcggacttg 1080
gaatagatcc cagttgcctg ataattcatc tcattattgc ctctaaagca aattggagac 1140
tgggcacagt ggctcccacc tttaatccca gcacctgggg aggctgaggt gagtggatca 1200
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tgagatcggg agttcgagac cggcctggcc aacatggtga aaccttgtct ctactaaaac 1560
tacaaaaaaa attggccagg cgtggtggcg ggcgcctgtg atcccagcta ctcgggaggc 1620
tgaggcagca gaatcgtttg aacccgggag gcggaggttg cagtgagtgg agatcgtgcc 1680
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<210> 18321
<211> 1523
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (447)..(1052)

<400> 18321
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gtcactcaag atctaggtct cgtgaaagac gccatcgtag tagaagcagg gagcggaaga 180
agtctcgatc caggagtagg gagcggaaga aatcgagatc cagaagcaga gagaggaaga 240
aatcgagatc cagaagcagg gaaagaaaac ggcggatcag gtctcgttcc cgctcaagat 300
caagacacag gcataggact agaagcagga gtaggacaag gagtaggagt cgagatagaa 360
agaagagaat tgaaaagccg agaagattta gcagaagttt aagccggact ccaagtccac 420
ctcccttcag aggcagaaac acagcaatgg atgcacagga agctttagct agaaggttgg 480
aaagggcaaa gaaattacaa gaacagcgag aaaaggaaat ggttgaaaaa caaaaacaac 540
aagaaatagc tgcagctgca gctactggag gttctgttct caatgttgct gccctgttgg 600
catcaggaac acaagtaaca cctcagatag ccatggcagc tcagatggca gccctgcaag 660
ctaaagcttt ggcagagaca ggaatagctg ttcctagcta ctataaccca gccgctgtta 720
atccaatgaa atttgctgaa caagagaaaa aaaggaaaat gctttggcag ggcaagaaag 780
aaggggacaa atcccaatct gctgaaatat gggaaaaatt gaattttgga aacaaggacc 840

0083703.0046.0200

aaaatgtcaa atttaggaaa ttgatgggta ttaagagtga agatgaagct ggatgtagct 900
cagttgatga agaaagttac aagactctga agcagcagga agaagtattt cgaaatttag 960
atgctcagta tgaaatggca agatcacaaa cccacacaca aagaggaatg ggtttgggtt 1020
tcacatcttc aatgcgagga atggatgcag tttgaaaatg atcacacttg taaagtttgg 1080
gacttataga cttcttgttc tgatgtcacg tccttgttca ccaaacagct agcactctag 1140
cttgcatggg tgttgcattg actttaattt attgaaaaat acaaattttt gtaaatatca 1200
gatcagtgat actggtgtta gtgttgtaat caggttaaac ccacttccat taaacttgac 1260
aggactatag aaggataata ttttttagtt catgaattct acttttcaaa tatataaaag 1320
ctgcaggtgg ggataaaatc tcatacatgg atttttttcgt gtccgctgtc ttgtgtactt 1380
ttgtacttaa ccttgtacag ttattttcat ctcttgaaac atgaaagaaa tgttatgtag 1440
atgttcttta gaagatctgg ccatttggta cataatccag cacagataag ctgggtggta 1500
atgataataa aaatggtttt ctc 1523

09629450.070300

<210> 18322
<211> 202
<212> PRT
<213> Homo sapiens

<400> 18322

Met	Asp	Ala	Gln	Glu	Ala	Leu	Ala	Arg	Arg	Leu	Glu	Arg	Ala	Lys	Lys
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Leu	Gln	Glu	Gln	Arg	Glu	Lys	Glu	Met	Val	Glu	Lys	Gln	Lys	Gln	Gln
			20					25					30		
Glu	Ile	Ala	Ala	Ala	Ala	Ala	Thr	Gly	Gly	Ser	Val	Leu	Asn	Val	Ala
		35					40					45			
Ala	Leu	Leu	Ala	Ser	Gly	Thr	Gln	Val	Thr	Pro	Gln	Ile	Ala	Met	Ala
	50					55					60				
Ala	Gln	Met	Ala	Ala	Leu	Gln	Ala	Lys	Ala	Leu	Ala	Glu	Thr	Gly	Ile
65					70					75					80
Ala	Val	Pro	Ser	Tyr	Tyr	Asn	Pro	Ala	Ala	Val	Asn	Pro	Met	Lys	Phe
				85					90					95	
Ala	Glu	Gln	Glu	Lys	Lys	Arg	Lys	Met	Leu	Trp	Gln	Gly	Lys	Lys	Glu
			100					105					110		
Gly	Asp	Lys	Ser	Gln	Ser	Ala	Glu	Ile	Trp	Glu	Lys	Leu	Asn	Phe	Gly
		115					120					125			
Asn	Lys	Asp	Gln	Asn	Val	Lys	Phe	Arg	Lys	Leu	Met	Gly	Ile	Lys	Ser
	130					135					140				
Glu	Asp	Glu	Ala	Gly	Cys	Ser	Ser	Val	Asp	Glu	Glu	Ser	Tyr	Lys	Thr
145					150					155					160
Leu	Lys	Gln	Gln	Glu	Glu	Val	Phe	Arg	Asn	Leu	Asp	Ala	Gln	Tyr	Glu
				165					170					175	
Met	Ala	Arg	Ser	Gln	Thr	His	Thr	Gln	Arg	Gly	Met	Gly	Leu	Gly	Phe
			180					185					190		
Thr	Ser	Ser	Met	Arg	Gly	Met	Asp	Ala	Val						
		195					200								

<210> 18323
<211> 1395
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (34)..(1002)

<400> 18323
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cagtacgtgg tgcggctgat ggcccccttc aacatgaggt gtaagacgtg cggagaatac 180
atctacaagg ggaagaaatt caatgctcgg aaggagacgg tgcagaacga ggtctacctg 240
ggcctgccca tcttccgctt ttacatcaag tgcacgcgct gcctggcaga gatcaccttc 300
aagacagacc ctgaaaacac agactacacc atggagcatg gagccacgcg gaatttccag 360
gctgagaagc tcctggagga ggaggagaag agggtgcaga aggagcggga ggacgaggag 420
ctgaacaacc ccatgaaggt gctggagaac cggaccaagg actccaagct ggagatggag 480
gtgctggaga acctccagga gctgaaagac ctgaaccagc ggcaggcgca cgtggacttc 540
gaggctatgc tgaggcagca ccgcctgtcg gaggaggagc ggcggaggca gcagcaggag 600
gaggacgagc aggagaccgc ggccctgttg gaggaagcca gaaagcgaag actgctggag 660
gactccgact cagaggatga ggctgctccc tcgcccctgc agccagccct tcggcccaac 720
cccaccgcca tcctggatga ggccccaaag cccaagagga aggtggaggt ccgggagcag 780
agcgttggca gcctgggcag ccggcccccg ctgtcgaggc tggtcgtggt gaagaaggca 840
aaggccgacc cggactgcag caacgggcag cctcaggcgg cccccacccc aggagccccg 900
cagaacagga aggaggccaa ccctacaccc ctgacgcctg gcgcgtcctc cctgagccaa 960
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gtcagggcag gaggccttgg cgtgactgga ggccggacag acaagcgcca gcgtgctcca 1140
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ctctcaacac ctcggggacc cctgctgctc ctgcccccac ctgtcactgt gcttagggct 1260
gcaacatccc tggagcagct tccaacacta cttcagggtg gcagtgtttg gggcactggg 1320
cgagcctgcc ggcctctaga tggcctcatc tcttccttcc acaaactgtc tagaaccaat 1380
aaaaggaaac ctgcc 1395

<210> 18324
<211> 323
<212> PRT
<213> Homo sapiens

<400> 18324
Met Ser Glu Arg Lys Val Leu Asn Lys Tyr Tyr Pro Pro Asp Phe Asp
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Pro Ser Lys Ile Pro Lys Leu Lys Leu Pro Lys Asp Arg Gln Tyr Val
20 25 30
Val Arg Leu Met Ala Pro Phe Asn Met Arg Cys Lys Thr Cys Gly Glu
35 40 45

0502045.0702800

```
Tyr Ile Tyr Lys Gly Lys Lys Phe Asn Ala Arg Lys Glu Thr Val Gln
     50                  55                  60
Asn Glu Val Tyr Leu Gly Leu Pro Ile Phe Arg Phe Tyr Ile Lys Cys
 65                  70                  75                  80
Thr Arg Cys Leu Ala Glu Ile Thr Phe Lys Thr Asp Pro Glu Asn Thr
                 85                  90                  95
Asp Tyr Thr Met Glu His Gly Ala Thr Arg Asn Phe Gln Ala Glu Lys
            100                 105                 110
Leu Leu Glu Glu Glu Glu Lys Arg Val Gln Lys Glu Arg Glu Asp Glu
        115                 120                 125
Glu Leu Asn Asn Pro Met Lys Val Leu Glu Asn Arg Thr Lys Asp Ser
    130                 135                 140
Lys Leu Glu Met Glu Val Leu Glu Asn Leu Gln Glu Leu Lys Asp Leu
145                 150                 155                 160
Asn Gln Arg Gln Ala His Val Asp Phe Glu Ala Met Leu Arg Gln His
                165                 170                 175
Arg Leu Ser Glu Glu Glu Arg Arg Arg Gln Gln Gln Glu Glu Asp Glu
            180                 185                 190
Gln Glu Thr Ala Ala Leu Leu Glu Glu Ala Arg Lys Arg Arg Leu Leu
        195                 200                 205
Glu Asp Ser Asp Ser Glu Asp Glu Ala Ala Pro Ser Pro Leu Gln Pro
    210                 215                 220
Ala Leu Arg Pro Asn Pro Thr Ala Ile Leu Asp Glu Ala Pro Lys Pro
225                 230                 235                 240
Lys Arg Lys Val Glu Val Arg Glu Gln Ser Val Gly Ser Leu Gly Ser
                245                 250                 255
Arg Pro Pro Leu Ser Arg Leu Val Val Val Lys Lys Ala Lys Ala Asp
            260                 265                 270
Pro Asp Cys Ser Asn Gly Gln Pro Gln Ala Ala Pro Thr Pro Gly Ala
        275                 280                 285
Pro Gln Asn Arg Lys Glu Ala Asn Pro Thr Pro Leu Thr Pro Gly Ala
    290                 295                 300
Ser Ser Leu Ser Gln Leu Gly Ala Tyr Leu Asp Ser Asp Asp Ser Asn
305                 310                 315                 320
Gly Ser Asn
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<210> 18325
<211> 2000
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (433)..(1998)

<400> 18325

0962469.0726800

aaagcactag tggcttgcca gattgtccta ccagacccag gtattgcagg ctttactgtc 60
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caggcaccta acaatcactt acttgcttta gatcactcaa atagtgatct cagcagcata 180
tatacttctg acagcacttc tgatttttc aagtcctgca gcaaggatac tttttcaaaa 240
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cacagcagtt tatctgtgac tccccagaga actactggag ccctgcatac accacctata 960
gctttaagat catcacaagt aatagtcaaa gcaaactgta gcaaagatga cttcctttc 1020
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aataacaacg taacacagag ctattctatt ggttatgaag gtagctatga tgcctctgct 1560
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tcagaatata attttgaaaa tagtcaagac tttgttccat gttcacagtc aactccaatt 1860
tcagggttcc accaaacaag aattcatggg ataaacagag ctttcaaaaa acctgtattt 1920
tattcagatc ttgatggtaa ctatgaaaaa ataaggattt tccctgaaaa tgacaaacag 1980
caagccagcc caagctgtcc 2000

<210> 18326
<211> 522
<212> PRT
<213> Homo sapiens

<400> 18326
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Val Asn Asp Ser Asn Leu Phe Ser Leu Glu Met Arg Glu Pro Leu Glu
35 40 45

Ser Ser Asn Thr Lys Ser Phe His Ser Ala Val Glu Ile Lys Asn Arg
50 55 60
Ser Gln His Glu Leu Pro Cys Phe Gln His His Gly Ile Asp Thr Pro
65 70 75 80
Thr Ser Leu Gln Lys Arg Ser Ala Cys Cys Pro Pro Ser Leu Leu Arg
85 90 95
Leu Glu Glu Thr Ala Ser Ser Ser Gln Asp Gly Asp Pro Gln Ile Trp
100 105 110
Asp Asp Leu Pro Phe Ser Glu Ser Leu Asn Lys Phe Leu Ala Val Leu
115 120 125
Glu Ser Glu Ile Ala Val Thr Gln Ala Asp Val Ser Ser Arg Lys His
130 135 140
His Val Asp Asn Asp Ile Asp Lys Phe His Ala Asp His Ser Ser Leu
145 150 155 160
Ser Val Thr Pro Gln Arg Thr Thr Gly Ala Leu His Thr Pro Pro Ile
165 170 175
Ala Leu Arg Ser Ser Gln Val Ile Val Lys Ala Asn Cys Ser Lys Asp
180 185 190
Asp Phe Leu Phe Asn Cys Lys Gly Asn Leu Ser Pro Ser Val Glu Lys
195 200 205
Glu Ser Gln Pro Asp Asn Lys Val Glu Ala Val Ser Val Asn His Asn
210 215 220
Gly Arg Asp Met Ser Glu Tyr Phe Leu Pro Asn Pro Tyr Leu Ser Ala
225 230 235 240
Leu Ser Ser Ser Ser Lys Asp Leu Glu Thr Ile Val Thr Leu Lys Lys
245 250 255
Thr Ile Arg Ile Ser Pro His Arg Glu Ser Asp His Ser Ser Leu Asn
260 265 270
Asn Lys Tyr Leu Asn Gly Cys Gly Glu Ile Ser Val Ser Glu Met Asn
275 280 285
Glu Lys Leu Thr Thr Leu Cys Tyr Arg Lys Tyr Asn Asp Val Ser Asp
290 295 300
Leu Cys Lys Leu Glu Asn Lys Gln Tyr Cys Arg Trp Ser Lys Asn Gln
305 310 315 320
Asp Asp Ser Phe Thr Ile Cys Arg Lys Leu Thr Tyr Pro Leu Glu Thr
325 330 335
Leu Cys Asn Ser Pro Asn Arg Ser Thr Asn Thr Leu Lys Glu Met Pro
340 345 350
Trp Gly His Ile Asn Asn Asn Val Thr Gln Ser Tyr Ser Ile Gly Tyr
355 360 365
Glu Gly Ser Tyr Asp Ala Ser Ala Asp Leu Phe Asp Asp Ile Ala Lys
370 375 380
Glu Met Asp Ile Ala Thr Glu Ile Thr Lys Lys Ser Gln Asp Ile Leu
385 390 395 400
Leu Lys Trp Gly Thr Ser Leu Ala Glu Ser His Pro Ser Glu Ser Asp
405 410 415
Phe Ser Leu Arg Ser Leu Ser Glu Asp Phe Ile Gln Pro Ser Gln Lys
420 425 430

0950450 0950800

Leu Ser Leu Gln Ser Leu Ser Asp Ser Arg His Ser Arg Thr Cys Ser
435 440 445
Pro Thr Pro His Phe Gln Ser Asp Ser Glu Tyr Asn Phe Glu Asn Ser
450 455 460
Gln Asp Phe Val Pro Cys Ser Gln Ser Thr Pro Ile Ser Gly Phe His
465 470 475 480
Gln Thr Arg Ile His Gly Ile Asn Arg Ala Phe Lys Lys Pro Val Phe
485 490 495
Tyr Ser Asp Leu Asp Gly Asn Tyr Glu Lys Ile Arg Ile Phe Pro Glu
500 505 510
Asn Asp Lys Gln Gln Ala Ser Pro Ser Cys
515 520

0602346.0002800

<210> 18327
<211> 2176
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (147)..(1244)

<400> 18327
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agaccctcag cctgcctgct gaggccatgt cggactacga gaacgatgac gagtgctgga 180
acgtcctgga gggcttccgg gtgacgctca cctcggtcat cgacccctca cgcatcacac 240
cttacctgcg gcagtgcaag gtcctgaacc ctgatgatga ggagcaggtg ctcagcgacc 300
ccaacctggt catccgcaaa cggaaagtgg gtgtgctcct ggacatcctg cagcggaccg 360
gccacaaggg ctacgtggcc ttcctcgaga gcctggagct ctactacccg cagctgtaca 420
agaaggtcac aggcaaggag ccggcccgcg tcttctccat gatcatcgac gcgtccgggg 480
agtcaggcct gactcagctg ctgatgactg aggtcatgaa gctgcagaag aaggtgcagg 540
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<212> PRT
<213> Homo sapiens

<400> 18328
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35 40 45
Leu Ser Asp Pro Asn Leu Val Ile Arg Lys Arg Lys Val Gly Val Leu
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Leu Asp Ile Leu Gln Arg Thr Gly His Lys Gly Tyr Val Ala Phe Leu
65 70 75 80
Glu Ser Leu Glu Leu Tyr Tyr Pro Gln Leu Tyr Lys Lys Val Thr Gly
85 90 95
Lys Glu Pro Ala Arg Val Phe Ser Met Ile Ile Asp Ala Ser Gly Glu
100 105 110
Ser Gly Leu Thr Gln Leu Leu Met Thr Glu Val Met Lys Leu Gln Lys
115 120 125
Lys Val Gln Asp Leu Thr Ala Leu Leu Ser Ser Lys Asp Asp Phe Ile
130 135 140
Lys Glu Leu Arg Val Lys Asp Ser Leu Leu Arg Lys His Gln Glu Arg
145 150 155 160
Val Gln Arg Leu Lys Glu Glu Cys Glu Ala Gly Ser Arg Glu Leu Lys
165 170 175
Arg Cys Lys Glu Glu Asn Tyr Asp Leu Ala Met Arg Leu Ala His Gln
180 185 190
Ser Glu Glu Lys Gly Ala Ala Leu Met Arg Asn Arg Asp Leu Gln Leu
195 200 205
Glu Ile Asp Gln Leu Lys His Ser Leu Met Lys Ala Glu Asp Asp Cys

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Leu Gln Ala Arg Val Gln Glu Leu Glu Ala Ser Val Gln Glu Gly Lys
            260                 265                 270
Leu Asp Arg Ser Ser Pro Tyr Ile Gln Val Leu Glu Glu Asp Trp Arg
        275                 280                 285
Gln Ala Leu Arg Asp His Gln Glu Gln Ala Asn Thr Ile Phe Ser Leu
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Arg Lys Asp Leu Arg Gln Gly Glu Ala Arg Arg Leu Arg Cys Met Glu
305                 310                 315                 320
Glu Lys Glu Met Phe Glu Leu Gln Cys Leu Ala Leu Arg Lys Asp Ser
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<211> 1604
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (25)..(1242)

<400> 18329

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<210> 18330
<211> 406
<212> PRT
<213> Homo sapiens

<400> 18330

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Ala	Ile	Gln	Leu	Ser	Gly	Ala	Glu	Gln	Leu	Glu	Ala	Leu	Lys	Ala	Phe
		35					40					45			
Val	Glu	Ala	Met	Val	Asn	Glu	Asn	Val	Ser	Leu	Val	Ile	Ser	Arg	Gln
	50					55					60				
Leu	Leu	Thr	Asp	Phe	Cys	Thr	His	Leu	Pro	Asn	Leu	Pro	Asp	Ser	Thr
65					70					75					80
Ala	Lys	Glu	Ile	Tyr	His	Phe	Thr	Leu	Glu	Lys	Ile	Gln	Pro	Arg	Val
				85					90					95	
Ile	Ser	Phe	Glu	Glu	Gln	Val	Ala	Ser	Ile	Arg	Gln	His	Leu	Ala	Ser
			100					105					110		
Ile	Tyr	Glu	Lys	Glu	Glu	Asp	Trp	Arg	Asn	Ala	Ala	Gln	Val	Leu	Val
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Gly	Ile	Pro	Leu	Glu	Thr	Gly	Gln	Lys	Gln	Tyr	Asn	Val	Asp	Tyr	Lys
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Pro	Val	Gln	Ala	Glu	Ala	Tyr	Ile	Asn	Arg	Ala	Ser	Leu	Leu	Gln	Asn
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	210					215					220				
Ala	Leu	Lys	His	Ala	Leu	His	Cys	Thr	Ile	Leu	Ala	Ser	Ala	Gly	Gln
225					230					235					240

Gln Arg Ser Arg Met Leu Ala Thr Leu Phe Lys Asp Glu Arg Cys Gln
245 250 255
Gln Leu Ala Ala Tyr Gly Ile Leu Glu Lys Met Tyr Leu Asp Arg Ile
260 265 270
Ile Arg Gly Asn Gln Leu Gln Glu Phe Ala Ala Met Leu Met Pro His
275 280 285
Gln Lys Ala Thr Thr Ala Asp Gly Ser Ser Ile Leu Asp Arg Ala Val
290 295 300
Ile Glu His Asn Leu Leu Ser Ala Ser Lys Leu Tyr Asn Asn Ile Thr
305 310 315 320
Phe Glu Glu Leu Gly Ala Leu Leu Glu Ile Pro Ala Ala Lys Ala Glu
325 330 335
Lys Ile Ala Ser Gln Met Ile Thr Glu Gly Arg Met Asn Gly Phe Ile
340 345 350
Asp Gln Ile Asp Gly Ile Val His Phe Glu Thr Arg Glu Ala Leu Pro
355 360 365
Thr Trp Asp Lys Gln Ile Gln Ser Leu Cys Phe Gln Val Asn Asn Leu
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385 390 395 400
Glu Ala Gln Met Ala Gln
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<211> 1277
<212> DNA
<213> Homo sapiens

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<211> 1376
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (89)..(823)

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<210> 18333
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<212> PRT
<213> Homo sapiens

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His Ser Glu Lys Lys Thr Ala Lys Arg Lys Gly Ser Ala Val Asp Ala
        35                  40                  45
Ser Val Gln Glu Glu Ser Pro Val Thr Lys Glu Asp Ser Ala Leu Cys
    50                  55                  60
Gly Gly Gly Asp Ile Cys Lys Ser Thr Leu Cys Asp Asp Thr Pro Asp
65                  70                  75                  80
Gly Ala Gly Gly Ala Phe Ala Ala Gln Pro Glu Asp Cys Asp Gly Glu
                85                  90                  95
Lys Arg Glu Asp Leu Glu Gln Leu Gln Gln Lys Gln Val Asn Asp His
            100                 105                 110
Pro Pro Glu Gln Cys Gly Met Phe Thr Val Ser Asp His Pro Pro Glu
        115                 120                 125
Gln His Gly Met Phe Thr Val Gly Asp His Pro Pro Glu Gln Arg Gly
    130                 135                 140
Met Phe Thr Val Ser Asp His Pro Pro Glu Gln Arg Gly Met Phe Thr
145                 150                 155                 160
Ile Ser Asp His Gln Pro Glu Gln Arg Gly Met Phe Thr Val Ser Asp
                165                 170                 175
His Thr Pro Glu Gln Arg Gly Ile Phe Thr Ile Ser Asp His Pro Ala
            180                 185                 190
Glu Gln Arg Gly Met Phe Thr Lys Glu Cys Glu Gln Glu Cys Glu Leu
        195                 200                 205
Ala Ile Thr Asp Leu Glu Ser Gly Arg Glu Asp Glu Ala Gly Leu His
    210                 215                 220
Gln Ser Gln Arg Pro Phe Leu Arg Arg Arg Pro Cys Met Ala Leu Ser
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<212> DNA
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0050204800

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<210> 18335
<211> 1528
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (60)..(638)

<400> 18335
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<210> 18336
<211> 193
<212> PRT
<213> Homo sapiens

<400> 18336
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Cys Ser Gly Arg Arg His Thr Val Pro Arg Arg Tyr Ser Glu Phe His
35 40 45
Ala Leu His Lys Arg Ile Lys Lys Leu Tyr Lys Val Pro Asp Phe Pro
50 55 60
Ser Lys Arg Leu Pro Asn Trp Arg Thr Arg Gly Leu Glu Gln Arg Arg
65 70 75 80
Gln Gly Leu Glu Ala Tyr Ile Gln Gly Ile Leu Tyr Leu Asn Gln Glu
85 90 95
Val Pro Lys Glu Leu Leu Glu Phe Leu Arg Leu Arg His Phe Pro Thr
100 105 110
Asp Pro Lys Ala Ser Asn Trp Gly Thr Leu Arg Glu Phe Leu Pro Gly
115 120 125
Asp Ser Ser Ser Gln Gln His Gln Arg Pro Val Leu Ser Phe His Val
130 135 140
Asp Pro Tyr Val Cys Asn Pro Ser Pro Glu Ser Leu Pro Asn Val Val
145 150 155 160
Val Asn Gly Val Leu Gln Gly Leu Tyr Ser Phe Ser Ile Ser Pro Asp
165 170 175
Lys Ala Gln Pro Lys Ala Ala Cys His Pro Ala Pro Leu Pro Leu Met
180 185 190
Pro

<210> 18337
<211> 1514
<212> DNA
<213> Homo sapiens

<220>
<221> CDS

0095295 0095295.0095295

<222> (113)..(1276)

<400> 18337
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ggctgaggaa ctggcacagc tgcggctgct caatctggag ctcctgaggc agctgtgggt 180
ggggcaggat gctgtgcggc ggtcagtggc cagggcagcc tcggagtcaa gcctggaatc 240
cagcagcagc tacaactcag agactccatc gaccccagag acgtcctcaa cttccttgag 300
cacctcctgc ccacggggcc ggtcctccgt gtggggccca ccagatgcct gtcgagggga 360
cctccgtgat gtggccagat cgggggtggc ctctctccca cctgccaagt gccagcacca 420
ggagtccctg ggccgaccga gaccccactc agcaccctcg ctgggcacct caagcctgag 480
ggacccagag ccctcaggga ggctgggtga tccaggaccc caggaggcac agaccccgag 540
gtccatcctg gctcaacaga gcaagctgtc caagcccagg gtgaccttct ctgaggagtc 600
tgcagttcct gagaggagct ggcgcctcag gccatacctg ggctatgact ggattgcagg 660
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ggagtttcgg gaaaccaaca aggaggagtg tatctgcagc catcctgaac cccagttgcc 780
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caggacaccg cgagaccagc agggccctgg gaccctggcg cagccagcgc acgtcagggt 960
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<210> 18338
<211> 388
<212> PRT
<213> Homo sapiens

<400> 18338
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Ala Arg Ala Ala Ser Glu Ser Ser Leu Glu Ser Ser Ser Ser Tyr Asn
35 40 45
Ser Glu Thr Pro Ser Thr Pro Glu Thr Ser Ser Thr Ser Leu Ser Thr
50 55 60
Ser Cys Pro Arg Gly Arg Ser Ser Val Trp Gly Pro Pro Asp Ala Cys
65 70 75 80
Arg Gly Asp Leu Arg Asp Val Ala Arg Ser Gly Val Ala Ser Leu Pro

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                  85                  90                  95
Pro Ala Lys Cys Gln His Gln Glu Ser Leu Gly Arg Pro Arg Pro His
             100                 105                 110
Ser Ala Pro Ser Leu Gly Thr Ser Ser Leu Arg Asp Pro Glu Pro Ser
         115                 120                 125
Gly Arg Leu Gly Asp Pro Gly Pro Gln Glu Ala Gln Thr Pro Arg Ser
     130                 135                 140
Ile Leu Ala Gln Gln Ser Lys Leu Ser Lys Pro Arg Val Thr Phe Ser
145                 150                 155                 160
Glu Glu Ser Ala Val Pro Glu Arg Ser Trp Arg Leu Arg Pro Tyr Leu
                165                 170                 175
Gly Tyr Asp Trp Ile Ala Gly Ser Leu Asp Thr Ser Ser Ser Ile Thr
            180                 185                 190
Ser Gln Pro Glu Ala Phe Phe Ser Lys Leu Gln Glu Phe Arg Glu Thr
        195                 200                 205
Asn Lys Glu Glu Cys Ile Cys Ser His Pro Glu Pro Gln Leu Pro Gly
    210                 215                 220
Leu Arg Glu Ser Ser Gly Ser Gly Val Glu Glu Asp His Glu Cys Val
225                 230                 235                 240
Tyr Cys Tyr Arg Val Asn Arg Arg Leu Phe Pro Val Pro Val Asp Pro
                245                 250                 255
Gly Thr Pro Cys Arg Leu Cys Arg Thr Pro Arg Asp Gln Gln Gly Pro
            260                 265                 270
Gly Thr Leu Ala Gln Pro Ala His Val Arg Val Ser Ile Pro Leu Ser
        275                 280                 285
Ile Leu Glu Pro Pro His Arg Tyr His Ile His Arg Arg Lys Ser Phe
    290                 295                 300
Asp Ala Ser Asp Thr Leu Ala Leu Pro Arg His Cys Leu Leu Gly Trp
305                 310                 315                 320
Asp Ile Phe Pro Pro Lys Ser Glu Lys Ser Ser Ala Pro Arg Asn Leu
                325                 330                 335
Asp Leu Trp Ser Ser Val Ser Ala Glu Ala Gln His Gln Lys Leu Ser
            340                 345                 350
Gly Thr Ser Ser Pro Phe His Pro Ala Ser Pro Met Gln Met Leu Pro
        355                 360                 365
Pro Thr Pro Thr Trp Ser Val Pro Gln Val Pro Arg Pro His Val Pro
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Arg Gln Lys Pro
385
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<210> 18339
<211> 1717
<212> DNA
<213> Homo sapiens

<220>
<221> CDS

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<222> (208)..(1389)

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cagaagcccg tgaagttcca gctggaggac gacggcgagt tctacatgat cggctccgag 300
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tacacgactc tagccaccag tgtgaccctg ttaaaagcct cggaagtgga agagattctg 480
gatggcaacg atgagaagta caaggctgtg tccatcagca cagagccccc cacctacctc 540
agggaacaga aggccaagag gaacagccag tgggtaccca ccctgcccaa cagctcccac 600
cacttagatg ccgtgccatg ctccacaacc atcaacaggg accgcatggg ccgagacaag 660
aagagaacct tccccctttg gtgtggatgc atcgctgcac tcaccctccg tgctgattcc 720
gccttagttc tccactttga tgaccatgac ccagctgtga tccatgagaa cgcatctcag 780
cccgaggtgc tggtccccat ccggctggac atggagatcg atgggcagaa gctgcgagac 840
gccttcacct ggaacatgaa tgagaagttg atgacgcctg agatgttttc agaaatcctc 900
tgtgacgatc tggatttgaa cccgctgacg tttgtgccag ccatcgcctc tgccatcaga 960
cagcagatcg agtcctaccc cacggacagc atcctggagg accagtcaga ccagcgcgtc 1020
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atgtcagaga aggagaactc accagagaag tttgccctga agctgtgctc ggagctgggg 1140
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cagaagacct acgccttcag cgagaaccct ctgcccacag tggagattgc catccggaac 1260
acgggcgatg cggaccagtg gtgcccactg ctggagactc tgacagacgc tgagatggag 1320
aagaagatcc gcgaccagga caggaacacg aggcggatga ggcgtcttgc caacacggcc 1380
ccggcctggt aaccagccca tcagcacacg gctcccacgg agcatctcag aagattgggc 1440
cgcctctcct ccatcttctg gcaaggacag aggcgagggg acagcccagc gccatcctga 1500
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<210> 18340
<211> 394
<212> PRT
<213> Homo sapiens

<400> 18340
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35 40 45
Ser Leu Trp Arg Arg Leu Ala Thr Val Glu Glu Arg Lys Lys Ile Val
50 55 60

0088270.0946.0

0002720-050402

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Leu Leu Lys Ala Ser Glu Val Glu Glu Ile Leu Asp Gly Asn Asp Glu
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Lys Tyr Lys Ala Val Ser Ile Ser Thr Glu Pro Pro Thr Tyr Leu Arg
            100                 105                 110
Glu Gln Lys Ala Lys Arg Asn Ser Gln Trp Val Pro Thr Leu Pro Asn
        115                 120                 125
Ser Ser His His Leu Asp Ala Val Pro Cys Ser Thr Thr Ile Asn Arg
    130                 135                 140
Asp Arg Met Gly Arg Asp Lys Lys Arg Thr Phe Pro Leu Trp Cys Gly
145                 150                 155                 160
Cys Ile Ala Ala Leu Thr Leu Arg Ala Asp Ser Ala Leu Val Leu His
                165                 170                 175
Phe Asp Asp His Asp Pro Ala Val Ile His Glu Asn Ala Ser Gln Pro
            180                 185                 190
Glu Val Leu Val Pro Ile Arg Leu Asp Met Glu Ile Asp Gly Gln Lys
        195                 200                 205
Leu Arg Asp Ala Phe Thr Trp Asn Met Asn Glu Lys Leu Met Thr Pro
    210                 215                 220
Glu Met Phe Ser Glu Ile Leu Cys Asp Asp Leu Asp Leu Asn Pro Leu
225                 230                 235                 240
Thr Phe Val Pro Ala Ile Ala Ser Ala Ile Arg Gln Gln Ile Glu Ser
                245                 250                 255
Tyr Pro Thr Asp Ser Ile Leu Glu Asp Gln Ser Asp Gln Arg Val Ile
            260                 265                 270
Ile Lys Leu Asn Ile His Val Gly Asn Ile Ser Leu Val Asp Gln Phe
        275                 280                 285
Glu Trp Asp Met Ser Glu Lys Glu Asn Ser Pro Glu Lys Phe Ala Leu
    290                 295                 300
Lys Leu Cys Ser Glu Leu Gly Leu Gly Gly Glu Phe Val Thr Thr Ile
305                 310                 315                 320
Ala Tyr Ser Ile Arg Gly Gln Leu Ser Trp His Gln Lys Thr Tyr Ala
                325                 330                 335
Phe Ser Glu Asn Pro Leu Pro Thr Val Glu Ile Ala Ile Arg Asn Thr
            340                 345                 350
Gly Asp Ala Asp Gln Trp Cys Pro Leu Leu Glu Thr Leu Thr Asp Ala
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Glu Met Glu Lys Lys Ile Arg Asp Gln Asp Arg Asn Thr Arg Arg Met
    370                 375                 380
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<212> DNA
<213> Homo sapiens

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<220>
<221> CDS
<222> (26)..(862)

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aacactgaat cctcagatgc tgcagaagaa attccggggt aagcctacag aggcctccat 180
agaagcaaga gtacaagaat atggagaatt agatgctaaa gattacattc caggagcaga 240
agttctggaa gttgagaaag aagagaatgc tgaaaatgat gaagatggat gggaaagtac 300
cagtctcagt gaggaggagg atgctgatgg tgaatggatt gatgtgcaac actcttccga 360
tgaagaacag caagaaatct ccaagaagct gaacagcatg cccatggagg agcggaaggc 420
caaagctgca gccatcagca ctagccgagt tttaactcag gaagacttcc agaaaatccg 480
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cattgaaata gacagtgatg aagagcccag gggtgaatta ctttctcttc gggacattga 600
acgccttcat aaaaagccaa agtctgacaa agagacaaga ctagcaactg caatggctgg 660
aaagacagac cgaaaagaat ttgtgaggaa gaaaaccaaa acaaatccat tttccagttc 720
gacaaataaa gagaagaaaa aacagaagaa ctttatgatg atgcggtata gccagaatgt 780
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gaaaaagaga aaaagaatga agtaacttcc tggcaagttt tccattccta gaagaatgct 900
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<212> PRT
<213> Homo sapiens

<400> 18342
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Thr Leu Asn Pro Gln Met Leu Gln Lys Lys Phe Arg Gly Lys Pro Thr

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Glu Ala Ser Ile Glu Ala Arg Val Gln Glu Tyr Gly Glu Leu Asp Ala
     50                  55                  60
Lys Asp Tyr Ile Pro Gly Ala Glu Val Leu Glu Val Glu Lys Glu Glu
 65                  70                  75                  80
Asn Ala Glu Asn Asp Glu Asp Gly Trp Glu Ser Thr Ser Leu Ser Glu
                 85                  90                  95
Glu Glu Asp Ala Asp Gly Glu Trp Ile Asp Val Gln His Ser Ser Asp
            100                 105                 110
Glu Glu Gln Gln Glu Ile Ser Lys Lys Leu Asn Ser Met Pro Met Glu
        115                 120                 125
Glu Arg Lys Ala Lys Ala Ala Ala Ile Ser Thr Ser Arg Val Leu Thr
    130                 135                 140
Gln Glu Asp Phe Gln Lys Ile Arg Met Ala Gln Met Arg Lys Glu Leu
145                 150                 155                 160
Asp Ala Ala Pro Gly Lys Ser Gln Lys Arg Lys Tyr Ile Glu Ile Asp
                165                 170                 175
Ser Asp Glu Glu Pro Arg Gly Glu Leu Leu Ser Leu Arg Asp Ile Glu
            180                 185                 190
Arg Leu His Lys Lys Pro Lys Ser Asp Lys Glu Thr Arg Leu Ala Thr
        195                 200                 205
Ala Met Ala Gly Lys Thr Asp Arg Lys Glu Phe Val Arg Lys Lys Thr
    210                 215                 220
Lys Thr Asn Pro Phe Ser Ser Ser Thr Asn Lys Glu Lys Lys Lys Gln
225                 230                 235                 240
Lys Asn Phe Met Met Met Arg Tyr Ser Gln Asn Val Arg Ser Lys Asn
                245                 250                 255
Lys Arg Ser Phe Arg Glu Lys Gln Leu Ala Leu Arg Asp Ala Leu Leu
            260                 265                 270
Lys Lys Arg Lys Arg Met Lys
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<210> 18343
<211> 3510
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (134)..(2419)

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ttttgattat aaaataaagt atcttaacag 3510

<210> 18344
<211> 762
<212> PRT
<213> Homo sapiens

<400> 18344

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			20					25					30		
Trp	Gln	Thr	Pro	Val	Ile	Ser	Glu	Pro	Phe	Arg	Ser	Arg	Phe	Ser	Arg
		35					40					45			
Cys	Ser	Ser	Val	Ala	Asp	Ser	Gly	Asp	Thr	Ala	Ile	Gly	Thr	Ser	Cys
	50					55					60				
Ser	Asp	Ile	Ala	Glu	Asp	Phe	Cys	Ser	Ser	Ser	Gly	Ser	Pro	Pro	Phe
65					70					75					80
Gln	Pro	Ile	Lys	Ser	His	Val	Thr	Ile	Pro	Thr	Ala	His	Val	Met	Pro
				85					90					95	
Ser	Thr	Leu	Gly	Thr	Ser	Pro	Ala	Lys	Pro	Asn	Ser	Thr	Pro	Val	Gly
			100					105					110		
Pro	Ser	Ser	Ser	Lys	Leu	Pro	Leu	Ser	Gly	Leu	Ala	Glu	Ser	Val	Gly
		115					120					125			
Met	Thr	Arg	Asn	Gly	Asp	Leu	Gly	Ala	Met	Lys	His	Ser	Pro	Gly	Leu
	130					135					140				
Ser	Arg	Asp	Leu	Met	Tyr	Phe	Ser	Gly	Ala	Thr	Gly	Glu	Asn	Gly	Ile
145					150					155					160
Glu	Gln	Ser	Trp	Phe	Pro	Ala	Val	Gly	His	Glu	Arg	Gln	Glu	Glu	Ala
				165					170					175	
Arg	Lys	Phe	Asp	Ile	Pro	Ser	Met	Glu	Ser	Thr	Leu	Asn	Gln	Ser	Ala
			180					185					190		
Met	Met	Glu	Thr	Leu	Tyr	Ser	Asp	Pro	His	His	Arg	Val	Arg	Phe	His
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Asn	Pro	Arg	Thr	Ser	Thr	Ser	Lys	Glu	Leu	Tyr	Arg	Val	Leu	Pro	Glu
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Ala	Lys	Lys	Ala	Pro	Gly	Ser	Gly	Ala	Val	Phe	Glu	Arg	Asn	Gly	Pro
225					230					235					240
His	Ser	Asn	Ser	Ser	Gly	Val	Leu	Pro	Leu	Gly	Leu	Gln	Pro	Ala	Pro
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0095/2000

0052470.0052470

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Gln Gln Leu Glu Leu Ile Arg Leu Gln Met Glu Gln Met Gln Leu Gln
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305                 310                 315                 320
Ile Leu Glu Pro Ala Gln Trp Ile Ser Ile Leu Asn Ser Asn Glu His
                325                 330                 335
Leu Leu Lys Glu Lys Glu Leu Leu Ile Asp Lys Gln Arg Lys His Ile
            340                 345                 350
Ser Gln Leu Glu Gln Lys Val Arg Glu Ser Glu Leu Gln Val His Ser
        355                 360                 365
Ala Leu Leu Gly Arg Pro Ala Pro Phe Gly Asp Val Cys Leu Leu Arg
    370                 375                 380
Leu Gln Glu Leu Gln Arg Glu Asn Thr Phe Leu Arg Ala Gln Phe Ala
385                 390                 395                 400
Gln Lys Thr Glu Ala Leu Ser Arg Glu Lys Ile Asp Leu Glu Lys Lys
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Leu Ser Ala Ser Glu Val Glu Val Gln Leu Ile Arg Glu Ser Leu Lys
            420                 425                 430
Val Ala Leu Gln Lys His Ser Glu Glu Val Lys Lys Gln Glu Glu Arg
        435                 440                 445
Val Lys Gly Arg Asp Lys His Ile Asn Asn Leu Lys Lys Lys Cys Gln
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Lys Glu Ser Glu Gln Asn Arg Glu Lys Gln Gln Arg Ile Glu Thr Leu
465                 470                 475                 480
Glu Arg Tyr Leu Ala Asp Leu Pro Thr Leu Glu Asp His Gln Lys Gln
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Ser Gln Gln Leu Lys Asp Ser Glu Leu Lys Ser Thr Glu Leu Gln Glu
            500                 505                 510
Lys Val Thr Glu Leu Glu Ser Leu Leu Glu Glu Thr Gln Ala Ile Cys
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Arg Glu Lys Glu Ile Gln Leu Glu Ser Leu Arg Gln Arg Glu Ala Glu
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Phe Ser Ser Ala Gly His Ser Leu Gln Asp Lys Gln Ser Val Glu Glu
545                 550                 555                 560
Thr Ser Gly Glu Gly Pro Glu Val Glu Met Glu Ser Trp Gln Lys Arg
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Tyr Asp Ser Leu Gln Lys Ile Val Glu Lys Gln Gln Gln Lys Met Asp
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Gln Leu Arg Ser Gln Val Gln Ser Leu Glu Gln Glu Val Ala Gln Glu
        595                 600                 605
Glu Gly Thr Ser Gln Ala Leu Arg Glu Glu Ala Gln Arg Arg Asp Ser
    610                 615                 620
Ala Leu Gln Gln Leu Arg Thr Ala Val Lys Glu Leu Ser Val Gln Asn
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Gln Asp Leu Ile Glu Lys Asn Leu Thr Leu Gln Glu His Leu Arg Gln
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Ala Gln Pro Gly Ser Pro Pro Ser Pro Asp Thr Ala Gln Leu Ala Leu
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675 680 685
Cys Ser Ile Val Thr Gln Arg Ala Gln Gly His Asp Pro Asn Leu Ser
690 695 700
Leu Leu Leu Gly Ile His Ser Gln His Pro Glu Thr Gln Leu Asp Leu
705 710 715 720
Gln Lys Pro Asp Val Ile Lys Arg Lys Leu Glu Glu Val Gln Gln Leu
725 730 735
Arg Arg Asp Ile Glu Asp Leu Arg Thr Thr Met Ser Asp Arg Tyr Ala
740 745 750
Gln Asp Met Gly Glu Asn Cys Val Thr Gln
755 760

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (252)..(1781)

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gtggttcttg gaaagaatcc agcatgaata ttattgaact ggagattcct gaccagaaca 720
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<211> 510
<212> PRT
<213> Homo sapiens

<400> 18346
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35 40 45
Ser His Lys Arg Lys Arg Ser Ser Gly Ser Phe Cys Tyr Cys His Pro
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Asp Ser Glu Thr Asp Glu Asp Glu Glu Glu Gly Asp Glu Gln Gln Arg
65 70 75 80
Leu Leu Asn Thr Pro Arg Arg Lys Lys Leu Lys Ser Thr Ser Lys Tyr
85 90 95
Ile Tyr Gln Thr Leu Phe Leu Asn Gly Glu Asn Ser Asp Ile Lys Ile
100 105 110
Cys Ala Leu Gly Glu Glu Trp Ser Leu His Lys Ile Tyr Leu Cys Gln
115 120 125
Ser Gly Tyr Phe Ser Ser Met Phe Ser Gly Ser Trp Lys Glu Ser Ser
130 135 140
Met Asn Ile Ile Glu Leu Glu Ile Pro Asp Gln Asn Ile Asp Val Gly
145 150 155 160
Ala Leu Gln Val Ala Phe Gly Ser Leu Tyr Arg Asp Asp Val Leu Ile
165 170 175
Lys Pro Ser Arg Val Val Ala Ile Leu Ala Ala Ala Cys Leu Leu Gln
180 185 190
Leu Asp Gly Leu Ile Gln Gln Cys Gly Glu Thr Met Lys Glu Ala Val
195 200 205
Asn Val Lys Thr Val Cys Gly Tyr Tyr Thr Ser Ala Gly Thr Tyr Gly
210 215 220
Leu Asp Ser Val Lys Lys Lys Cys Leu Glu Trp Leu Leu Asn Asn Leu
225 230 235 240
Met Thr His Gln Asn Val Glu Leu Phe Lys Glu Leu Ser Ile Asn Val
245 250 255

0050450.0020000

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Met Asp Ile Tyr Thr Ala Leu Lys Lys Trp Met Phe Leu Gln Leu Val
        275                 280                 285
Pro Ser Trp Asn Gly Ser Leu Lys Gln Leu Leu Thr Glu Thr Asp Val
    290                 295                 300
Trp Phe Ser Lys Gln Arg Lys Asp Phe Glu Gly Met Ala Phe Leu Glu
305                 310                 315                 320
Thr Glu Gln Gly Lys Pro Phe Val Ser Val Phe Arg His Leu Arg Leu
                325                 330                 335
Gln Tyr Ile Ile Ser Asp Leu Ala Ser Ala Arg Ile Ile Glu Gln Asp
            340                 345                 350
Ala Val Val Pro Ser Glu Trp Leu Ser Ser Val Tyr Lys Gln Gln Trp
        355                 360                 365
Phe Ala Met Leu Arg Ala Glu Gln Asp Ser Glu Val Gly Pro Gln Glu
    370                 375                 380
Ile Asn Lys Glu Glu Leu Glu Gly Asn Ser Met Arg Cys Gly Arg Lys
385                 390                 395                 400
Leu Ala Lys Asp Gly Glu Tyr Cys Trp Arg Trp Thr Gly Phe Asn Phe
                405                 410                 415
Gly Phe Asp Leu Leu Val Thr Tyr Thr Asn Arg Tyr Ile Ile Phe Lys
            420                 425                 430
Arg Asn Thr Leu Asn Gln Pro Cys Ser Gly Ser Val Ser Leu Gln Pro
        435                 440                 445
Arg Arg Ser Ile Ala Phe Arg Leu Arg Leu Ala Ser Phe Asp Ser Ser
    450                 455                 460
Gly Lys Leu Ile Cys Ser Arg Thr Thr Gly Tyr Gln Ile Leu Thr Leu
465                 470                 475                 480
Glu Lys Asp Gln Glu Gln Val Val Met Asn Leu Asp Ser Arg Leu Leu
                485                 490                 495
Ile Phe Pro Leu Tyr Ile Cys Cys Asn Phe Leu Tyr Ile Ser
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<210> 18347
<211> 3046
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (290)..(1111)

<400> 18347
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0002760-0002760

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<210> 18348
<211> 274
<212> PRT
<213> Homo sapiens

<400> 18348

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Asp Thr Gly Ser Leu Thr Ile Pro Ser Gln Glu Gly Val Asn Phe Lys
        35                  40                  45
Ile Val Thr Val Asp Phe Thr Arg Glu Glu Gln Gly Thr Trp Asn Pro
    50                  55                  60
Ala Gln Arg Thr Leu Asp Arg Asp Val Ile Leu Glu Asn His Arg Asp
65                  70                  75                  80
Leu Val Ser Trp Asp Leu Ala Thr Ala Val Gly Lys Lys Asp Ser Thr
                85                  90                  95
Ser Lys Gln Arg Ile Phe Asp Glu Glu Pro Ala Asn Gly Val Lys Ile
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Glu Arg Phe Thr Arg Asp Asp Pro Trp Leu Ser Ser Cys Glu Glu Val
        115                 120                 125
Asp Asp Cys Lys Asp Gln Leu Glu Lys Gln Gln Glu Lys Gln Glu Ile
    130                 135                 140
Leu Leu Gln Glu Val Ala Phe Thr Gln Arg Lys Ala Val Ile His Glu
145                 150                 155                 160
Arg Val Cys Lys Ser Asp Glu Thr Gly Glu Lys Ser Gly Leu Asn Ser
                165                 170                 175
Ser Leu Phe Ser Ser Pro Val Ile Pro Ile Arg Asn His Phe His Lys
            180                 185                 190
His Val Ser His Ala Lys Lys Trp His Leu Asn Ala Ala Val Asn Ser
        195                 200                 205
His Gln Lys Ile Asn Glu Asn Glu Thr Leu Tyr Glu Asn Asn Glu Cys
    210                 215                 220
Gly Lys Pro Pro Gln Ser Ile His Leu Ile Gln Phe Thr Arg Thr Gln
225                 230                 235                 240
Thr Lys Asp Lys Cys Tyr Gly Phe Ser Asp Arg Thr Gln Ser Phe Cys
                245                 250                 255
His Gly Thr Pro Leu His Ile His Glu Lys Asn Ser Trp Arg Arg Lys
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<210> 18349
<211> 2606
<212> DNA

<213> Homo sapiens

<220>
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<222> (166)..(1455)

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<211> 430
<212> PRT
<213> Homo sapiens

<400> 18350
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20 25 30
Pro Pro Gly Glu Glu Pro Asp Leu Asp Pro Gly Gln Gly Thr Leu Cys
35 40 45
Arg Pro Cys Pro Pro Gly Thr Phe Ser Ala Ala Trp Gly Ser Ser Pro
50 55 60
Cys Gln Pro His Ala Arg Cys Ser Leu Trp Arg Arg Leu Glu Ala Gln
65 70 75 80
Val Gly Met Ala Thr Arg Asp Thr Leu Cys Gly Asp Cys Trp Pro Gly
85 90 95
Trp Phe Gly Pro Trp Gly Val Pro Arg Val Pro Cys Gln Pro Cys Ser
100 105 110
Trp Ala Pro Leu Gly Thr His Gly Cys Asp Glu Trp Gly Arg Arg Ala
115 120 125
Arg Arg Gly Val Glu Val Ala Ala Gly Ala Ser Ser Gly Gly Glu Thr
130 135 140
Arg Gln Pro Gly Asn Gly Thr Arg Ala Gly Gly Pro Glu Glu Thr Ala
145 150 155 160
Ala Gln Tyr Ala Val Ile Ala Ile Val Pro Val Phe Cys Leu Met Gly
165 170 175
Leu Leu Gly Ile Leu Val Cys Asn Leu Leu Glu Arg Lys Gly Tyr His
180 185 190
Cys Thr Ala His Lys Glu Val Gly Pro Gly Pro Gly Gly Gly Gly Ser
195 200 205
Gly Ile Asn Pro Ala Tyr Arg Thr Glu Asp Ala Asn Glu Asp Thr Ile
210 215 220
Gly Val Leu Val Arg Leu Ile Thr Glu Lys Lys Glu Asn Ala Ala Ala
225 230 235 240
Leu Glu Glu Leu Leu Lys Glu Tyr His Ser Lys Gln Leu Val Gln Thr
245 250 255
Ser His Arg Pro Val Ser Lys Leu Pro Pro Ala Pro Pro Asn Val Pro
260 265 270
Arg Ile Cys Pro His Arg His His Leu His Thr Val Gln Gly Leu Ala
275 280 285
Ser Leu Ser Gly Pro Cys Cys Ser Arg Cys Ser Gln Lys Lys Trp Pro

0098290-050402

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305                 310                 315                 320
Ser Leu Leu Pro Asn Pro Thr Arg Val Pro Lys Ala Gly Ala Lys Ala
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Gly Arg Gln Gly Glu Ile Thr Ile Leu Ser Val Gly Arg Phe Arg Val
            340                 345                 350
Ala Arg Ile Pro Glu Gln Arg Thr Ser Ser Met Val Ser Glu Val Lys
        355                 360                 365
Thr Ile Thr Glu Ala Gly Pro Ser Trp Gly Asp Leu Pro Asp Ser Pro
    370                 375                 380
Gln Pro Gly Leu Pro Pro Glu Gln Gln Ala Leu Leu Gly Ser Gly Gly
385                 390                 395                 400
Ser Arg Thr Lys Trp Leu Lys Pro Pro Ala Glu Asn Lys Ala Glu Glu
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<220>
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<222> (33)..(1106)

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0002720-960409

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<211> 358
<212> PRT
<213> Homo sapiens

0020020469-0020020469

<400> 18352

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         35                  40                  45
Lys Ser Glu Asn Glu Trp Thr Gln Thr Arg Gln Gly Glu Gly Asn Ser
     50                  55                  60
Thr Tyr Ser Glu Glu Gln Leu Leu Gly Val Gln Arg Ile Lys Lys Cys
 65                  70                  75                  80
Arg Asn Tyr Tyr Glu Ile Leu Gly Val Ser Arg Asp Ala Ser Asp Glu
                 85                  90                  95
Glu Leu Lys Lys Ala Tyr Arg Lys Leu Ala Leu Lys Phe His Pro Asp
            100                 105                 110
Lys Asn Cys Ala Pro Gly Ala Thr Asp Ala Phe Lys Ala Ile Gly Asn
        115                 120                 125
Ala Phe Ala Val Leu Ser Asn Pro Asp Lys Arg Leu Arg Tyr Asp Glu
    130                 135                 140
Tyr Gly Asp Glu Gln Val Thr Phe Thr Ala Pro Arg Ala Arg Pro Tyr
145                 150                 155                 160
Asn Tyr Tyr Arg Asp Phe Glu Ala Asp Ile Thr Pro Glu Glu Leu Phe
                165                 170                 175
Asn Val Phe Phe Gly Gly His Phe Pro Thr Gly Asn Ile His Met Phe
            180                 185                 190
Ser Asn Val Thr Asp Asp Thr Tyr Tyr Tyr Arg Arg Arg His Arg His
        195                 200                 205
Glu Arg Thr Gln Thr Gln Lys Glu Glu Glu Glu Glu Lys Pro Gln Thr
    210                 215                 220
Thr Tyr Ser Ala Phe Ile Gln Leu Leu Pro Val Leu Val Ile Val Ile
225                 230                 235                 240
Ile Ser Val Ile Thr Gln Leu Leu Ala Thr Asn Pro Pro Tyr Ser Leu
                245                 250                 255
Phe Tyr Lys Ser Thr Leu Gly Tyr Thr Ile Ser Arg Glu Thr Gln Asn
            260                 265                 270
Leu Gln Val Pro Tyr Phe Val Asp Lys Asn Phe Asp Lys Ala Tyr Arg
        275                 280                 285
Gly Ala Ser Leu His Asp Leu Glu Lys Thr Ile Glu Lys Asp Tyr Ile
    290                 295                 300
Asp Tyr Ile Gln Thr Ser Cys Trp Lys Glu Lys Gln Gln Lys Ser Glu
305                 310                 315                 320
Leu Thr Asn Leu Ala Gly Leu Tyr Arg Asp Glu Arg Leu Lys Gln Lys
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (262)..(1110)

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<210> 18354
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<212> PRT
<213> Homo sapiens

<400> 18354

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         35                  40                  45
Ala Gln Leu Thr Lys Ser Asn Ala Pro Val His Ile Asp Val Gly Gly
     50                  55                  60
His Met Tyr Thr Ser Ser Leu Ala Thr Leu Thr Lys Tyr Pro Asp Ser
 65                  70                  75                  80
Arg Ile Ser Arg Leu Phe Asn Gly Thr Glu Pro Ile Val Leu Asp Ser
                 85                  90                  95
Leu Lys Gln His Tyr Phe Ile Asp Arg Asp Gly Glu Ile Phe Arg Tyr
            100                 105                 110
Val Leu Ser Phe Leu Arg Thr Ser Lys Leu Leu Leu Pro Asp Asp Phe
        115                 120                 125
Lys Asp Phe Ser Leu Leu Tyr Glu Glu Ala Arg Tyr Tyr Gln Leu Gln
    130                 135                 140
Pro Met Val Arg Glu Leu Glu Arg Trp Gln Gln Glu Gln Glu Gln Arg
145                 150                 155                 160
Arg Arg Ser Arg Ala Cys Asp Cys Leu Val Val Arg Val Thr Pro Asp
                165                 170                 175
Leu Gly Glu Arg Ile Ala Leu Ser Gly Glu Lys Ala Leu Ile Glu Glu
            180                 185                 190
Val Phe Pro Glu Thr Gly Asp Val Met Cys Asn Ser Val Asn Ala Gly
        195                 200                 205
Trp Asn Gln Asp Pro Thr His Val Ile Arg Phe Pro Leu Asn Gly Tyr
    210                 215                 220
Cys Arg Leu Asn Ser Val Gln Val Leu Glu Arg Leu Phe Gln Arg Gly
225                 230                 235                 240
Phe Ser Val Ala Ala Ser Cys Gly Gly Gly Val Asp Ser Ser Gln Phe
                245                 250                 255
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<211> 1887
<212> DNA
<213> Homo sapiens

<220>
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<222> (1092)..(1679)

<400> 18355
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<210> 18356
<211> 196
<212> PRT
<213> Homo sapiens

09/29/2006 09:50:59 0

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<400> 18356

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         35                  40                  45
Leu His Trp Leu Leu Thr Asn Ile Pro Gly Asn Arg Val Ala Glu Gly
     50                  55                  60
Gln Val Thr Cys Pro Tyr Leu Pro Pro Phe Pro Ala Arg Gly Ser Gly
 65                  70                  75                  80
Ile His Arg Leu Ala Phe Leu Leu Phe Lys Gln Asp Gln Pro Ile Asp
                 85                  90                  95
Phe Ser Glu Asp Ala Arg Pro Ser Pro Cys Tyr Gln Leu Ala Gln Arg
            100                 105                 110
Thr Phe Arg Thr Phe Asp Phe Tyr Lys Lys His Gln Glu Thr Met Thr
        115                 120                 125
Pro Ala Gly Leu Ser Phe Phe Gln Cys Arg Trp Asp Asp Ser Val Thr
    130                 135                 140
Tyr Ile Phe His Gln Leu Leu Asp Met Arg Glu Pro Val Phe Glu Phe
145                 150                 155                 160
Val Arg Pro Pro Pro Tyr His Pro Lys Gln Lys Arg Phe Pro His Arg
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Gln Pro Leu Arg Tyr Leu Asp Arg Tyr Arg Asp Ser His Glu Pro Thr
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<210> 18357
<211> 2340
<212> DNA
<213> Homo sapiens

<400> 18357

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<211> 3168
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (6)..(1592)

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<212> PRT
<213> Homo sapiens

<400> 18359

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Lys Asn Lys Ser Val Glu Leu Lys Glu Arg Ile Arg Glu Tyr Leu Lys
     50                  55                  60
Gly His Tyr Tyr Val Pro Leu Leu Arg Ala Glu Glu Thr Ser Ser Pro
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Val Ile Gly Glu Leu Trp Ser Pro Asp Gln Thr Ala Glu Ala Ser His
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Val Ser Arg Tyr Gly Gly Ser Pro Arg Asp Pro Val Leu Thr Leu Arg
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Ala Phe Ala Gly Pro Leu Ser Pro Ala Lys Ala Glu Asp Phe Arg Lys
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Leu Trp Lys Thr Pro Pro Arg Glu Lys Ala Gly Phe Leu His His Val
    130                 135                 140
Lys Lys Ser Asp Pro Glu Arg Gly Phe Glu Arg Val Gly Arg Glu Leu
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Ala His Glu Leu Gly Tyr Pro Trp Val Glu Tyr Trp Glu Phe Leu Gly
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Cys Phe Val Asp Leu Ser Ser Gln Glu Gly Leu Gln Arg Leu Glu Glu
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Tyr Leu Thr Gln Gln Glu Ile Gly Lys Lys Ala Gln Gln Glu Thr Gly
        195                 200                 205
Glu Arg Glu Ala Ser Cys Arg Asp Lys Ala Thr Thr Ser Gly Ser Asn
    210                 215                 220
Ser Ile Ser Val Arg Ala Phe Leu Asp Glu Asp Asp Met Ser Leu Glu
225                 230                 235                 240
Glu Ile Lys Asn Arg Gln Asn Ala Ala Arg Asn Asn Ser Pro Pro Thr
                245                 250                 255
Val Gly Ala Phe Gly His Thr Arg Cys Ser Ala Phe Pro Leu Glu Gln
            260                 265                 270
Glu Ala Asp Leu Ile Glu Ala Ala Glu Pro Gly Gly Pro His Ser Ser
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Arg Asn Gly Leu Cys His Pro Leu Asn His Ser Arg Thr Leu Ala Gly
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Lys Arg Pro Lys Ala Pro Arg Gly Glu Glu Ala His Leu Pro Pro Val
305                 310                 315                 320
Ser Asp Leu Thr Val Glu Phe Asp Lys Leu Asn Leu Gln Asn Ile Gly
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Arg Ser Val Ser Lys Thr Pro Asp Glu Ser Thr Lys Thr Lys Asp Gln
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385 390 395 400
His Glu Asp Gln Leu Glu Val Thr Arg Glu Pro Ala Arg Arg Leu Phe
405 410 415
Leu Phe Gly Glu Glu Pro Ser Lys Leu Asp Gln Asp Val Leu Ala Ala
420 425 430
Leu Glu Cys Ala Asp Val Asp Pro His Gln Phe Pro Ala Val His Arg
435 440 445
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<213> Homo sapiens

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<221> CDS
<222> (62)..(907)

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0050450 0050450

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<211> 282
<212> PRT
<213> Homo sapiens

<400> 18361

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Arg Asp Thr Met Asp Phe Ser Gly Leu Ser Leu Ile Lys Leu Lys Lys
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Gln Glu Met Glu Thr Gln Val Arg Val Leu Glu Leu Glu Lys Thr Leu
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Glu Ala Glu Arg Met Arg Leu Gly Glu Leu Arg Lys Gln His Tyr Val
    210                 215                 220
Leu Ala Gly Ala Ser Gly Ser Pro Gly Glu Glu Val Ala Ile Arg Pro
225                 230                 235                 240
Ser Thr Ala Pro Arg Ser Val Thr Thr Lys Lys Pro Pro Leu Ala Gln
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<211> 3807
<212> DNA
<213> Homo sapiens

<220>
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<222> (152)..(1006)

<400> 18362
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<211> 285
<212> PRT
<213> Homo sapiens

<400> 18363

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Pro Leu Arg Pro Cys Ile Gln Leu Ser Ser Lys Asn Glu Ala Ser Gly
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Met Val Ala Pro Ala Val Gln Glu Lys Lys Val Lys Lys Arg Val Ser
    50                  55                  60
Phe Ala Asp Asn Gln Gly Leu Ala Leu Thr Met Val Lys Val Phe Ser
65                  70                  75                  80
Glu Phe Asp Asp Pro Leu Asp Met Pro Phe Asn Ile Thr Glu Leu Leu
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Ile Ala Gly Thr Ala Lys Val Gln Asn Leu Ala Phe Glu Lys Thr Val
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Cys Gln Tyr Val Lys Asp Thr Tyr Ala Gly Ser Asp Arg Asp Thr Phe
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225                 230                 235                 240
Gln Gly Met Thr Lys Pro His Ser Gly Pro Asp Leu Gly Ile Ser Phe
                245                 250                 255
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<212> DNA
<213> Homo sapiens

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<400> 18367

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<400> 18368

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Asp Glu Lys Ala Lys Pro Arg Asp Arg Gln Gln Ala Pro Gly Leu Gly
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Leu Ala Ala Pro Ser Leu His Val Lys Glu Gln Leu Pro Cys Ala Gly
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Val Val Lys Gly Tyr Asn Ile Trp Thr Gly Gly Pro Asp Ala Cys Leu
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Arg Cys Trp Asp Gln Arg Thr Ile Met Lys Pro Leu Glu Tyr Gln Phe
325 330 335
Lys Ser Gln Ile Met Ser Leu Ser His Ser Pro Gln Glu Asp Trp Val
340 345 350
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355 360 365
Ser Gln Arg His Met Val Gly Gln Lys Asp Ser Val Ile Leu Ser Val
370 375 380
Lys Phe Ser Pro Phe Gly Gln Trp Trp Ala Ser Val Gly Met Asp Asp
385 390 395 400
Phe Leu Gly Val Tyr Ser Met Pro Ala Gly Thr Lys Val Phe Glu Val
405 410 415
Pro Glu Met Ser Pro Val Thr Cys Cys Asp Val Ser Ser Asn Asn Arg
420 425 430
Leu Val Val Thr Gly Ser Gly Glu His Ala Ser Val Tyr Gln Ile Thr
435 440 445
Tyr

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<211> 2065
<212> DNA
<213> Homo sapiens

0950250 .0N2380

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<212> PRT
<213> Homo sapiens

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35 40 45
Gly Ile Cys Leu Pro Asp Leu Ser Ile Ile Ser Met Met Lys Gln Arg
50 55 60
Thr Glu Pro Trp Thr Val Glu Asn Glu Met Lys Val Ala Lys Asn Pro
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Cys Arg Pro Gly Trp Ser Thr Val Val
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<212> DNA
<213> Homo sapiens

<220>
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<222> (57)..(1217)

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<212> PRT
<213> Homo sapiens

<400> 18373
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35 40 45
Arg Glu Glu Val Asp Glu Ala Ala Ser Thr Leu Thr Arg Leu Pro Ile
50 55 60
Asp Val Gln Leu Tyr Ile Leu Ser Phe Leu Ser Pro His Asp Leu Cys
65 70 75 80
Gln Leu Gly Ser Thr Asn His Tyr Trp Asn Glu Thr Val Arg Asp Pro
85 90 95
Ile Leu Trp Arg Tyr Phe Leu Leu Arg Asp Leu Pro Ser Trp Ser Ser
100 105 110
Val Asp Trp Lys Ser Leu Pro Asp Leu Glu Ile Leu Lys Lys Pro Ile
115 120 125
Ser Glu Val Thr Asp Gly Ala Phe Phe Asp Tyr Met Ala Val Tyr Arg
130 135 140
Met Cys Cys Pro Tyr Thr Arg Arg Ala Ser Lys Ser Ser Arg Pro Met
145 150 155 160
Tyr Gly Ala Val Thr Ser Phe Leu His Ser Leu Ile Ile Gln Asn Glu
165 170 175
Pro Arg Phe Ala Met Phe Gly Pro Gly Leu Glu Glu Leu Asn Thr Ser
180 185 190
Leu Val Leu Ser Leu Met Ser Ser Glu Glu Leu Cys Pro Thr Ala Gly
195 200 205
Leu Pro Gln Arg Gln Ile Asp Gly Ile Gly Ser Gly Val Asn Phe Gln
210 215 220
Leu Asn Asn Gln His Lys Phe Asn Ile Leu Ile Leu Tyr Ser Thr Thr
225 230 235 240
Arg Lys Glu Arg Asp Arg Ala Arg Glu Glu His Thr Ser Ala Val Asn
245 250 255
Lys Met Phe Ser Arg His Asn Glu Gly Asp Asp Gln Gln Gly Ser Arg
260 265 270
Tyr Ser Val Ile Pro Gln Ile Gln Lys Val Cys Glu Val Val Asp Gly

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Asp Glu Phe Ser His Ile Met Ala Met Thr Asp Pro Ala Phe Gly Ser
305                 310                 315                 320
Ser Gly Arg Pro Leu Leu Val Leu Ser Cys Ile Ser Gln Gly Asp Val
                325                 330                 335
Lys Arg Met Pro Cys Phe Tyr Leu Ala His Glu Leu Arg Leu Asn Leu
            340                 345                 350
Leu Asn His Pro Trp Leu Val Gln Asp Thr Glu Ala Glu Thr Leu Thr
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<210> 18374
<211> 1863
<212> DNA
<213> Homo sapiens

<400> 18374

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<210> 18375
<211> 3456
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (61)..(1791)

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<210> 18376
<211> 577
<212> PRT
<213> Homo sapiens

<400> 18376

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Gly Ser Tyr Gly Phe Gly Leu Glu Asp Lys Asn Lys Val Pro Ile Ile
         35                  40                  45
Lys Leu Val Glu Lys Gly Ser Asn Ala Glu Met Ala Gly Met Glu Val
     50                  55                  60
Gly Lys Lys Ile Phe Ala Ile Asn Gly Asp Leu Val Phe Met Arg Pro
 65                  70                  75                  80
Phe Asn Glu Val Asp Cys Phe Leu Lys Ser Cys Leu Asn Ser Arg Lys
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0056294 0056294

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    130                 135                 140
Leu His Pro Gly Gln Cys Ile Ile Lys Val Asn Gly Ile Asn Val Ser
145                 150                 155                 160
Lys Glu Thr His Ala Ser Val Ile Ala His Val Thr Ala Cys Arg Lys
                165                 170                 175
Tyr Arg Arg Pro Thr Lys Gln Asp Ser Ile Gln Trp Val Tyr Asn Ser
            180                 185                 190
Ile Glu Ser Ala Gln Glu Asp Leu Gln Lys Ser His Ser Lys Pro Pro
        195                 200                 205
Gly Asp Glu Ala Gly Asp Ala Phe Asp Cys Lys Val Glu Glu Val Ile
    210                 215                 220
Asp Lys Phe Asn Thr Met Ala Ile Ile Asp Gly Lys Lys Glu His Val
225                 230                 235                 240
Ser Leu Thr Val Asp Asn Val His Leu Glu Tyr Gly Val Val Tyr Glu
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Tyr Asp Ser Thr Ala Gly Ile Lys Cys Asn Val Val Glu Lys Met Ile
            260                 265                 270
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Ala Lys Ser Asp Glu His Phe Val Gln Asn Cys Thr Ser Leu Asn Ser
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Leu Asn Glu Val Ile Pro Thr Asp Leu Gln Ser Lys Phe Ser Ala Leu
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Cys Ser Glu Arg Ile Glu His Leu Cys Gln Arg Ile Ser Ser Tyr Lys
                325                 330                 335
Lys Phe Ser Arg Val Leu Lys Asn Arg Ala Trp Pro Thr Phe Lys Gln
            340                 345                 350
Ala Lys Ser Lys Ile Ser Pro Leu His Ser Ser Asp Phe Cys Pro Thr
        355                 360                 365
Asn Cys His Val Asn Val Met Glu Val Ser Tyr Pro Lys Thr Ser Thr
    370                 375                 380
Ser Leu Gly Ser Ala Phe Gly Val Gln Leu Asp Ser Arg Lys His Asn
385                 390                 395                 400
Ser His Asp Lys Glu Asn Lys Ser Ser Glu Gln Gly Lys Leu Ser Pro
                405                 410                 415
Met Val Tyr Ile Gln His Thr Ile Thr Thr Met Ala Ala Pro Ser Gly
            420                 425                 430
Leu Ser Leu Gly Gln Gln Asp Gly His Gly Leu Arg Tyr Leu Leu Lys
        435                 440                 445
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    450                 455                 460
Leu Gln Thr Ala Leu Lys Glu Val Glu Met Cys Val Cys Gln Ile Asp
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            500                 505                 510
Asn Ser Lys Arg Val Cys Phe Asn Val Ala Gly Asp Glu Gln Glu Asp
        515                 520                 525
Ser Gly His Asp Thr Ile Ser Asn Arg Asp Ser Tyr Ser Asp Cys Asn
    530                 535                 540
Ser Asn Arg Asn Ser Ile Ala Ser Phe Thr Ser Ile Cys Ser Ser Gln
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Cys Ser Ser Tyr Phe Thr Val Met Lys Trp Thr Gln Val Met Asn Phe
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<211> 2073
<212> DNA
<213> Homo sapiens

<400> 18377

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Phe His Cys Leu Trp Asp Asp Ser Phe Pro Glu Gly Pro Glu Arg Leu
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<213> Homo sapiens

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Pro Gln Gln Leu Thr Ser Pro Gly Tyr Pro Glu Pro Tyr Gly Lys Gly

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Asp Ser Val Thr Ile Ser Phe Val Gly Ser Asp Pro Ser Gln Phe Cys
            100                 105                 110
Gly Gln Gln Gly Ser Pro Leu Gly Arg Pro Pro Gly Gln Arg Glu Phe
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Val Ser Ser Gly Arg Ser Leu Arg Leu Thr Phe Arg Thr Gln Pro Ser
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Ser Glu Asn Lys Thr Ala His Leu His Lys Gly Phe Leu Ala Leu Tyr
145                 150                 155                 160
Gln Thr Val Ala Val Asn Tyr Ser Gln Pro Ile Ser Glu Ala Ser Arg
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Gly Ser Glu Ala Ile Asn Ala Pro Gly Asp Asn Pro Ala Lys Val Gln
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    210                 215                 220
Val Leu Gln Cys Met Pro Val Cys Gly Trp Pro Val Thr Pro Ile Ala
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Gln Asn Gln Thr Thr Leu Gly Ser Ser Arg Ala Lys Leu Gly Asn Phe
                245                 250                 255
Pro Trp Gln Ala Phe Thr Ser Ile His Gly Arg Gly Gly Gly Ala Leu
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Leu Gly Asp Arg Trp Ile Leu Thr Ala Ala His Thr Val Tyr Pro Lys
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Asp Ser Val Ser Leu Arg Lys Asn Gln Ser Val Asn Val Phe Leu Gly
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His Thr Ala Ile Asp Glu Met Leu Lys Leu Gly Asn His Pro Val His
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Arg Val Val Val His Pro Asp Tyr Arg Gln Asn Glu Ser His Asn Phe
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Ser Gly Asp Ile Ala Leu Leu Glu Leu Gln His Ser Ile Pro Leu Gly
            340                 345                 350
Pro Asn Val Leu Pro Val Cys Leu Pro Asp Asn Glu Thr Leu Tyr Arg
        355                 360                 365
Ser Gly Leu Leu Gly Tyr Val Ser Gly Phe Gly Met Glu Met Gly Trp
    370                 375                 380
Leu Thr Thr Glu Leu Lys Tyr Ser Arg Leu Pro Val Ala Pro Arg Glu
385                 390                 395                 400
Ala Cys Asn Ala Trp Leu Gln Lys Arg Gln Arg Pro Glu Val Phe Ser
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435

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (131)..(1624)

<400> 18385
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<211> 498
<212> PRT
<213> Homo sapiens

<400> 18386

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Arg	Ile	Trp	Lys	Asn	Glu	Ile	Asn	Asn	Thr	Asn	Thr	Phe	Arg	Val	Leu
		35					40					45			
Pro	His	Pro	Ser	Phe	Val	Tyr	Thr	Ala	Lys	Phe	His	Pro	Ala	Val	Arg
	50					55					60				
Glu	Leu	Val	Val	Thr	Gly	Cys	Tyr	Asp	Ser	Met	Ile	Arg	Ile	Trp	Lys
65					70					75					80
Val	Glu	Met	Arg	Glu	Asp	Ser	Ala	Ile	Leu	Val	Arg	Gln	Phe	Asp	Val
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His	Lys	Ser	Phe	Ile	Asn	Ser	Leu	Cys	Phe	Asp	Thr	Glu	Gly	His	His
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		115					120					125			
Val	Lys	Ile	Asn	Asp	Leu	Glu	His	Ser	Val	His	His	Trp	Thr	Ile	Asn
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Glu	Ile	His	Pro	Asn	Gly	Lys	Arg	Leu	Leu	Ile	His	Thr	Lys	Asp	Ser
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Thr	Leu	Arg	Ile	Met	Asp	Leu	Arg	Ile	Leu	Val	Ala	Arg	Lys	Phe	Val
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0060204.0060450

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225                 230                 235                 240
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                245                 250                 255
Ala Phe Cys Ala Phe Gly Gln Asn Glu Pro Ile Leu Leu Tyr Ile Tyr
            260                 265                 270
Asp Phe His Val Ala Gln Gln Glu Ala Glu Met Phe Lys Arg Tyr Asn
        275                 280                 285
Gly Thr Phe Pro Leu Pro Gly Ile His Gln Ser Gln Asp Ala Leu Cys
    290                 295                 300
Thr Cys Pro Lys Leu Pro His Gln Gly Ser Phe Gln Ile Asp Glu Phe
305                 310                 315                 320
Val His Thr Glu Ser Ser Ser Thr Lys Met Gln Leu Val Lys Gln Arg
                325                 330                 335
Leu Glu Thr Val Thr Glu Val Ile Arg Ser Cys Ala Ala Lys Val Asn
            340                 345                 350
Lys Asn Leu Ser Phe Thr Ser Pro Pro Ala Val Ser Ser Gln Gln Ser
        355                 360                 365
Lys Leu Lys Gln Ser Asn Met Leu Thr Ala Gln Glu Ile Leu His Gln
    370                 375                 380
Phe Gly Phe Thr Gln Thr Gly Ile Ile Ser Ile Glu Arg Lys Pro Cys
385                 390                 395                 400
Asn His Gln Val Asp Thr Ala Pro Thr Val Val Ala Leu Tyr Asp Tyr
                405                 410                 415
Thr Ala Asn Arg Ser Asp Glu Leu Thr Ile His Arg Gly Asp Ile Ile
            420                 425                 430
Arg Val Phe Phe Lys Asp Asn Glu Asp Trp Trp Tyr Gly Ser Ile Gly
        435                 440                 445
Lys Gly Gln Glu Gly Tyr Leu Pro Ala Asn His Val Ala Ser Glu Thr
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Leu Tyr Gln Glu Leu Pro Pro Glu Ile Lys Glu Arg Ser Pro Pro Leu
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (274)..(1452)

0960250-070800

<400> 18387

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<211> 393
<212> PRT
<213> Homo sapiens

<400> 18388
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35 40 45
Gln Arg Ser Gly Ser Leu Glu Ser Gln Ser His Leu Leu Ser Glu Met
50 55 60
Asp Ser Asp Lys Pro Phe Phe Ser Leu Ser Lys Ser Gln Arg Ser Ser
65 70 75 80
Ser Thr Glu Ile Leu Asp Asp Gly Ser Ser Tyr Thr Ser Gln Ser Ser
85 90 95
Thr Glu Tyr Tyr Cys Val Thr Pro Val Thr Gly Pro Tyr Tyr Thr Thr
100 105 110
Gln Thr Leu Asp Thr Arg Thr Arg Gly Arg Arg Arg Ser Lys Lys Gln
115 120 125
Asn Val Ser Thr Ser Asn Ser Gly Ser Met Pro Asn Leu Ala Gln Lys
130 135 140
Asp Ser Leu Arg Asn Gly Val Tyr Ser Lys Ser Gln Glu Pro Pro Ser
145 150 155 160
Ser Ser Tyr Tyr Ile Ala Gly Tyr Thr Pro Tyr Ala Glu Cys Asp Phe
165 170 175
Tyr Tyr Ser Gly Gly Tyr Val Tyr Glu Asn Asp Thr Glu Gly Gln Tyr
180 185 190
Ser Val Asn Pro Ser Tyr Arg Ser Ser Ala His Tyr Gly Tyr Glu Arg
195 200 205
Gln Arg Asp Tyr Ser Arg Ser Phe His Glu Asp Glu Val Asp Arg Val
210 215 220
Pro His Asn Pro Tyr Ala Thr Leu Arg Leu Pro Arg Lys Ala Ala Ala
225 230 235 240
Lys Ser Glu His Ile Thr Lys Asn Ile His Lys Ala Leu Val Ala Glu
245 250 255
His Leu Arg Gly Trp Tyr Gln Arg Ala Ser Gly Gln Lys Asp Gln Gly
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His Ser Pro Gln Thr Ser Phe Asp Ser Asp Arg Gly Ser Gln Arg Cys

0060245 - 0060800

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Ser Tyr Thr Ser Cys Tyr Gly Asn Val Tyr Asn Pro Leu Pro Ser Pro
            340                 345                 350
Ser Arg Gln Tyr Thr Glu Ile Ser Gln Leu Asp Gly Thr Asp Gly Asn
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Gln Leu Glu Asp Asn Leu Glu Ser Ser Glu Gln Arg Leu Phe Trp His
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<210> 18389
<211> 2069
<212> DNA
<213> Homo sapiens

<400> 18389

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (58)..(1824)

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<211> 589
<212> PRT
<213> Homo sapiens

<400> 18391
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35 40 45
Glu Ile Lys Thr Ile Gly Tyr Thr Ser Pro Arg Ser Arg Thr Glu Val
50 55 60
Asn Arg Gln Cys Pro Gly Glu Lys Glu Pro Val Ser Asp Leu Gln Leu
65 70 75 80
Gly Leu Asp Ala Val Glu Pro Thr Ala Leu His Lys Thr Leu Glu Thr
85 90 95
Pro Ala His Asp Arg Ala Glu Pro Asn Ser Gln Leu Asp Ser Thr His
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Ser Gly Arg Gly Thr Met Tyr Ser Ser Trp Val Lys Ser Pro Asp Arg

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0062365 0062365.0

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145                 150                 155                 160
Cys Leu Met Gln Asp Asp Thr Arg Gly Met Phe Met Glu Thr Thr Val
                165                 170                 175
Phe Cys Thr Ser Glu Asp Gly Leu Val Ser Gly Phe Gly Arg Thr Val
            180                 185                 190
Asn Asp Asn Leu Ile Asp Gly Asn Cys Thr Pro Gln Asn Pro Pro Gln
        195                 200                 205
Lys Lys Lys Val Ser Leu Leu Glu Tyr Arg Lys Arg Gln Arg Glu Ala
    210                 215                 220
Arg Lys Ser Gly Ser Lys Thr Glu Asn Phe Pro Leu Ile Ser Val Ser
225                 230                 235                 240
Pro His Ala Ser Gly Ser Leu Ser Asn Asn Gly Asp Gly Cys Ala Ser
                245                 250                 255
Ser Asn Asp Asn Gly Glu Gln Val Asp His Thr Ala Ser Leu Pro Leu
            260                 265                 270
Pro Thr Pro Ala Thr Val Tyr Asn Ala Thr Ser Glu Glu Thr Ser Asn
        275                 280                 285
Asn Cys Pro Val Lys Asp Ala Thr Ala Ser Glu Lys Asn Glu Pro Glu
    290                 295                 300
Val Gln Trp Thr Ala Ser Thr Ser Val Glu Gln Val Arg Glu Arg Ser
305                 310                 315                 320
Tyr Gln Arg Ala Leu Leu Leu Ser Asp His Arg Lys Asp Lys Asp Ser
                325                 330                 335
Gly Gly Glu Ser Pro Cys Val Ser Cys Ser Pro Ser His Val Gln Ser
            340                 345                 350
Ser Pro Ser Ser His Ser Asn His Ile Pro Gln Leu Gln Ala Lys Gly
        355                 360                 365
Pro Val Pro Ser Phe Ser Glu Leu Met Glu Asp Pro Asp Pro Glu Asn
    370                 375                 380
Pro Glu Pro Thr Thr Thr Asn Glu Cys Pro Ser Pro Asp Thr Ser Gln
385                 390                 395                 400
Asn Thr Cys Lys Ser Pro Pro Lys Met Ser Lys Pro Gly Ser Pro Gly
                405                 410                 415
Ser Val Ile Pro Ala Gln Ala His Gly Lys Ile Phe Thr Lys Pro Asp
            420                 425                 430
Pro Gln Trp Asp Ser Thr Val Ser Ala Ser Glu Ala Glu Asn Gly Val
        435                 440                 445
His Leu Lys Thr Glu Leu Gln Gln Lys Gln Leu Ser Asn Asn Asn Gln
    450                 455                 460
Ala Leu Ser Lys Asn His Pro Pro Gln Thr His Val Arg Asn Ser Ser
465                 470                 475                 480
Glu Gln Leu Ser Gln Lys Leu Pro Ser Val Pro Thr Lys Leu His Cys
                485                 490                 495
Pro Pro Ser Pro His Leu Glu Asn Pro Pro Lys Ser Ser Thr Pro His
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            500                 505                 510
Thr Pro Val Gln His Gly Tyr Leu Ser Pro Lys Pro Pro Ser Gln Gln
        515                 520                 525
Leu Gly Ser Pro Tyr Arg Pro His His Ser Gln Ser Pro Gln Val Gly
    530                 535                 540
Thr Pro Gln Arg Glu Pro Gln Arg Asn Phe Tyr Pro Ala Ala Gln Asn
545                 550                 555                 560
Leu Pro Ala Asn Thr Gln Gln Ala Thr Ser Gly Thr Leu Phe Thr Gln
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<210> 18392
<211> 2342
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (89)..(1867)

<400> 18392

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cggctcccca caccgccggc ccctgtcagt ggacaaacac ggacggcagg ccgacagctg 480
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tgactccgcc ctgcaccaga gcacaatgac gcccacgcag ccagaatcct ttagcagtgg 600
gtcccaggac gtgcaccaga aaagagtctt actgttaaca gtcccaggaa tggaagagac 660
cacatcagag gcagacaaaa acctttccaa gcaagcatgg gacaccaaga agacggggtc 720
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gc 2342

<210> 18393
<211> 593
<212> PRT
<213> Homo sapiens

<400> 18393
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20 25 30
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35 40 45
Gln Tyr Leu Gln Leu Gly Pro Ser Arg Gly Gln Tyr Tyr Gly Gly Ser
50 55 60
Leu Pro Asn Val Asn Gln Ile Gly Ser Gly Thr Met Asp Leu Pro Phe
65 70 75 80
Gln Thr Pro Ser Gln Ser Ser Gly Leu Asp Thr Ser Arg Thr Thr Arg
85 90 95
His His Gly Leu Val Asp Arg Val Tyr Arg Glu Arg Gly Arg Leu Gly
100 105 110
Ser Pro His Arg Arg Pro Leu Ser Val Asp Lys His Gly Arg Gln Ala
115 120 125
Asp Ser Cys Pro Tyr Gly Thr Met Tyr Leu Ser Pro Pro Ala Asp Thr
130 135 140
Ser Trp Arg Arg Thr Asn Ser Asp Ser Ala Leu His Gln Ser Thr Met
145 150 155 160
Thr Pro Thr Gln Pro Glu Ser Phe Ser Ser Gly Ser Gln Asp Val His
165 170 175
Gln Lys Arg Val Leu Leu Leu Thr Val Pro Gly Met Glu Glu Thr Thr
180 185 190
Ser Glu Ala Asp Lys Asn Leu Ser Lys Gln Ala Trp Asp Thr Lys Lys

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225                 230                 235                 240
Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn Ile His Phe Pro Ser
                245                 250                 255
Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Pro Thr Phe Pro Ala Leu
            260                 265                 270
Ser Ser Ser Ser Ser Thr Gly Asn Leu Ala Ala Asn Leu Thr His Leu
        275                 280                 285
Gly Ile Gly Gly Ala Gly Gln Gly Met Ser Thr Pro Gly Ser Ser Pro
    290                 295                 300
Gln His Arg Pro Ala Gly Val Ser Pro Leu Ser Leu Ser Thr Glu Ala
305                 310                 315                 320
Arg Arg Gln Gln Ala Ser Pro Thr Leu Ser Pro Leu Ser Pro Ile Thr
                325                 330                 335
Gln Ala Val Ala Met Asp Ala Leu Ser Leu Glu Gln Gln Leu Pro Tyr
            340                 345                 350
Ala Phe Phe Thr Gln Ala Gly Ser Gln Gln Pro Pro Pro Gln Pro Gln
        355                 360                 365
Pro Pro Pro Pro Pro Pro Pro Ala Ser Gln Gln Pro Pro Pro Pro Ser
    370                 375                 380
Pro Pro Gln Ala Pro Val Arg Leu Pro Pro Gly Gly Pro Leu Leu Pro
385                 390                 395                 400
Ser Ala Ser Leu Thr Arg Gly Pro Gln Pro Pro Pro Leu Ala Val Thr
                405                 410                 415
Val Pro Ser Ser Leu Pro Gln Ser Pro Pro Glu Asn Pro Gly Gln Pro
            420                 425                 430
Ser Met Gly Ile Asp Ile Ala Ser Ala Pro Ala Leu Gln Gln Tyr Arg
        435                 440                 445
Thr Ser Ala Gly Ser Pro Ala Asn Gln Ser Pro Thr Ser Pro Val Ser
    450                 455                 460
Asn Gln Gly Phe Ser Pro Gly Ser Ser Pro Gln Leu Glu Gln Phe Asn
465                 470                 475                 480
Met Met Glu Asn Ala Ile Ser Ser Ser Ser Leu Tyr Ser Pro Gly Ser
                485                 490                 495
Thr Leu Asn Tyr Ser Gln Ala Ala Met Met Gly Leu Thr Gly Ser His
            500                 505                 510
Gly Ser Leu Pro Asp Ser Gln Gln Leu Gly Tyr Ala Ser His Gly Gly
        515                 520                 525
Ile Pro Asn Ile Ile Leu Thr Val Thr Gly Glu Ser Pro Pro Ser Leu
    530                 535                 540
Ser Lys Glu Leu Thr Ser His Arg Gly His Leu Pro Asp Gly Pro Pro
545                 550                 555                 560
Val Ser Gly His Ala Gly Thr Leu Pro Leu Ser Arg Pro Asp Gly Ala
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Ser Pro Ala Arg Gly Arg Pro Cys Ser Val Pro Arg Gln Arg Pro Ser
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<210> 18394
<211> 1882
<212> DNA
<213> Homo sapiens

<400> 18394
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<210> 18395
<211> 1570
<212> DNA

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<213> Homo sapiens

<220>
<221> CDS
<222> (101)..(1147)

<400> 18395
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cacaaatttt taaaacttct acatgtattt ttcacatgaa gatctcctta acaggttgcc 1500
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<210> 18396
<211> 349
<212> PRT
<213> Homo sapiens

<400> 18396
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Pro Lys Asn Asp Thr Asp Asp Glu Ser Glu Thr Pro Glu Glu Leu Glu
35 40 45

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0602045-050800

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Thr Met Ala Ala Ile Asn Ser Phe Tyr Ser Asn Thr Asp Ala Asn Ile
 65                  70                  75                  80
Leu Phe Tyr Val Val Gly Leu Arg Asn Thr Leu Thr Arg Ile Arg Lys
                 85                  90                  95
Trp Ile Glu His Ser Lys Leu Arg Glu Ile Asn Phe Lys Ile Val Glu
            100                 105                 110
Phe Asn Pro Met Val Leu Lys Gly Lys Ile Arg Pro Asp Ser Ser Arg
        115                 120                 125
Pro Glu Leu Leu Gln Pro Leu Asn Phe Val Arg Phe Tyr Leu Pro Leu
    130                 135                 140
Leu Ile His Gln His Glu Lys Val Ile Tyr Leu Asp Asp Asp Val Ile
145                 150                 155                 160
Val Gln Gly Asp Ile Gln Glu Leu Tyr Asp Thr Thr Leu Ala Leu Gly
                165                 170                 175
His Ala Ala Ala Phe Ser Asp Asp Cys Asp Leu Pro Ser Ala Gln Asp
            180                 185                 190
Ile Asn Arg Leu Val Gly Leu Gln Asn Thr Tyr Met Gly Tyr Leu Asp
        195                 200                 205
Tyr Arg Lys Lys Ala Ile Lys Asp Leu Gly Ile Ser Pro Ser Thr Cys
    210                 215                 220
Ser Phe Asp Pro Gly Val Ile Val Ala Asn Met Thr Glu Trp Lys His
225                 230                 235                 240
Gln Arg Ile Thr Lys Gln Leu Glu Lys Trp Met Gln Lys Asn Val Glu
                245                 250                 255
Glu Asn Leu Tyr Ser Ser Ser Leu Gly Gly Gly Val Ala Thr Ser Pro
            260                 265                 270
Met Leu Ile Val Phe His Gly Lys Tyr Ser Thr Ile Asn Pro Leu Trp
        275                 280                 285
His Ile Arg His Leu Gly Trp Asn Pro Asp Ala Arg Tyr Ser Glu His
    290                 295                 300
Phe Leu Gln Glu Ala Lys Leu Leu His Trp Asn Gly Arg His Lys Pro
305                 310                 315                 320
Trp Asp Phe Pro Ser Val His Asn Asp Leu Trp Glu Ser Trp Phe Val
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Pro Asp Pro Ala Gly Ile Phe Lys Leu Asn His His Ser
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<210> 18397
<211> 949
<212> DNA
<213> Homo sapiens

<400> 18397
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<213> Homo sapiens

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<212> PRT
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Arg Leu Ala Cys Asn Gly Thr Thr Ser Ala His Cys Asp Leu Cys Leu
50 55 60
Leu Ser Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln Val Ala Gly Ile
65 70 75 80
Thr Gly Glu Lys Thr Ala Glu Pro His Lys Ala His Ala Ala Gln Gly
85 90 95
Glu Arg His Leu Ser Ser His Met Ser Pro Asp Glu Asn Met Thr Glu
100 105 110
Lys Phe Cys Pro Gly Pro Arg Ala Ser Phe His Leu Arg Ile Leu Ala
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 237
<212> PRT
<213> Homo sapiens

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Arg Pro Leu Ser Cys Ala Ser Pro Ser Ala Thr Cys Ala Cys Thr Ala
35 40 45
Ser Ala Pro Gln Glu Glu Leu Gln Asp Ala Leu Thr Pro Gln Gln Thr
50 55 60
Leu Ser Arg Arg Lys Val Glu Ala Pro Thr Glu Arg Cys Phe Ser Leu
65 70 75 80
Arg Met Lys Ser Thr Leu Thr Ser Arg Gly Arg Thr Leu Asn Leu Lys
85 90 95
Ala Ala Thr Trp Lys Val Leu Asn Cys Ser Gly His Met Arg Ala Tyr
100 105 110
Lys Pro Pro Ala Gln Thr Ser Pro Ala Gly Ser Pro Asp Ser Glu Pro
115 120 125
Pro Leu Gln Cys Leu Val Leu Ile Cys Glu Ala Ile Pro His Pro Gly
130 135 140
Ser Leu Glu Gly Phe Val Met Val Leu Thr Ala Glu Gly Asp Met Ala

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145                 150                 155                 160
Tyr Leu Ser Glu Asn Val Ser Asn His Leu Gly Leu Ser Gln Leu Glu
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Leu Ile Gly His Ser Ile Phe Asp Phe Ile His Pro Cys Asp Gln Glu
            180                 185                 190
Glu Leu Gln Asp Ala Leu Thr Pro His Leu Asn Thr Ser Ser Leu Leu
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Pro Lys Pro Gln Gly Thr Val Ser Phe Leu Ala Pro Ser Tyr Pro Val
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Pro Arg Ser Phe Ser Pro His Leu Pro Pro Trp Trp Pro
225                 230                 235
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<211> 1492
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (61)..(657)

<400> 18404

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<211> 199
<212> PRT
<213> Homo sapiens

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Leu Cys Ser Met Arg Glu Asn Glu Ala Tyr Gln Ala Ser Cys Lys Glu
35 40 45
Arg Phe Phe Ser Glu Glu Glu Asn Gly Gly Ile Asp Arg His Val Trp
50 55 60
Pro Pro Leu Ser Gly Leu Pro Pro Leu Ser Lys Met Ser Leu Asn Lys
65 70 75 80
Asp Leu His Phe Asn Thr Ser Ile Ala Asn Leu Val Ile Leu Arg Gly
85 90 95
Lys Asp Val Gln Ser Ala Asp Val Glu Gly Phe Lys Asp Pro Ala Leu
100 105 110
Tyr Thr Ser Trp Leu Lys Pro Val Asn Ala Phe Asn Val Trp Lys Thr
115 120 125
Gln Arg Ala Phe Ser Lys Tyr Glu Lys Ser Ala Val Leu Val Ser Asp
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Ser Gln Phe Leu Val Lys Pro Leu Asp Met Ile Val Gly Lys Ala Trp
145 150 155 160
Asn Met Phe Ala Ser Lys Ala Tyr Ile His Gln Tyr Thr Lys Phe Gly
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<210> 18406
<211> 1659
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (120)..(704)

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0562450.0720800

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<400> 18409

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<212> PRT
<213> Homo sapiens

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145 150 155 160
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195 200 205
Glu Thr Ser Arg Gly Ile Gly Val Ser Ser Asn Gly Ala Lys Pro Glu
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<213> Homo sapiens

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Asp Arg Pro Phe Met Gly Gly Gln Lys Pro Asn Leu Ala Asp Leu Ala
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US 6,562,618 B2 May 13, 2003

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<213> Homo sapiens

<400> 18423
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Ala Val Phe Glu Ile Pro His Gln Glu Ser Arg Gly Ser Ser Gln His
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Ile Leu Ser Ser Leu Arg Phe Val Phe Cys Phe Pro His Gly Asp Leu
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Thr Glu Phe Gly Phe Leu Met Pro Glu Leu Cys Leu Val Leu Lys Val
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His Glu Phe His Ala Asp Leu Arg Ser Cys Phe Ala Pro Gln His Met
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Ala Met Leu Cys Ser Pro Ile Leu Tyr Gly Ser His Thr Ser Leu Gln
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Glu Phe Leu Arg Gln Leu Leu Thr Phe Tyr Lys Val Ala Gly Gly Cys
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Gln Glu Arg Ser Gln Gly Cys Phe Pro Val Tyr Leu Val Tyr Ser Asp
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Lys Arg Met Val Gln Thr Ala Ala Gly Asp Tyr Ser Gly Asn Ile Glu
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Trp Ala Ser Cys Thr Leu Cys Ser Ala Val Arg Arg Ser Cys Cys Ala
225                 230                 235                 240
Pro Ser Glu Ala Val Lys Ser Ala Ala Ile Pro Tyr Trp Leu Leu Leu
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Thr Pro Gln His Leu Asn Val Ile Lys Ala Asp Phe Asn Pro Met Pro
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Asn Arg Gly Thr His Asn Cys Arg Asn Arg Asn Ser Phe Lys Leu Ser
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Arg Val Pro Leu Ser Thr Val Leu Leu Asp Pro Thr Arg Ser Cys Thr
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Gln Pro Arg Gly Ala Phe Ala Asp Gly His Val Leu Glu Leu Leu Val
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Gly Tyr Arg Phe Val Thr Ala Ile Phe Val Leu Pro His Glu Lys Phe
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His Phe Leu Arg Val Tyr Asn Gln Leu Arg Ala Ser Leu Gln Asp Leu
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Lys Thr Val Val Ile Ala Lys Thr Pro Gly Thr Gly Gly Ser Pro Gln
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Gln Tyr Pro Ser Glu His Leu Ile Gln Ala Thr Ser Glu Glu Asn Gln
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Leu Arg Gly Ser Ala Ile Ile Glu Leu Phe His Ser Ser Ile Ala Glu
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Gln Ser Val Asn Val Gly Leu Phe Asp Gln His Phe Arg Leu Thr Gly
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Leu Ser Ile Leu Leu Tyr Val Gln Ala Phe Gln Val Gly Met Pro Pro
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Pro Gly Cys Cys Arg Gly Pro Leu Arg Pro Lys Thr Leu Leu Leu Thr
705                 710                 715                 720
Ser Ser Glu Ile Phe Leu Leu Asp Glu Asp Cys Val His Tyr Pro Leu
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Pro Glu Phe Ala Lys Glu Pro Pro Gln Arg Asp Arg Tyr Arg Leu Asp
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Asp Gly Arg Arg Val Arg Asp Leu Asp Arg Val Leu Met Gly Tyr Gln
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Thr Tyr Pro Gln Ala Leu Thr Leu Val Phe Asp Asp Val Gln Gly His
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Asp Leu Met Gly Ser Ala Glu Ser Arg Glu Lys Leu Ile Ser Leu Leu
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<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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35 40 45
Gln Gln Ala Leu Pro Tyr Thr Ser Ala Val Leu His Glu Val Gln Arg
50 55 60
Phe Ile Thr Leu Leu Pro Pro Gly Leu Pro Leu Thr His Ala Gln Asp
65 70 75 80
Leu Thr Pro Ala Thr Ser Pro Ala Gly Pro Arg Pro Arg Pro Pro Thr
85 90 95
Ala Val Asp Pro Asp Ala Glu Pro Thr Leu Leu Arg Glu Pro Gln Ala
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Thr Val Val Phe Thr Thr His Val Pro Thr Leu Gly Arg Tyr Ala Phe
115 120 125
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Pro Pro Pro Gln Cys Gly Leu Pro Ser Arg Val Pro Gly Pro Ser Ser
145 150 155 160
Glu Met Ser Gly Pro Arg Arg Thr Ser Trp Arg Arg Thr Ser Arg Arg
165 170 175
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His Met Pro Arg Leu Trp Leu Leu Lys Pro Arg Thr Pro Pro Pro Val

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<213> Homo sapiens

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<213> Homo sapiens

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<212> PRT
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Asp His Leu Ala Phe Ser Cys Asp Val Ala Lys Glu His Asp Val Gln
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Asn Thr Phe Glu Glu Met Glu Lys His Leu Gly Arg Val Asn Phe Leu
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Gln Ser Val Tyr Ser Ala Ser Lys Gly Gly Leu Val Gly Phe Ser Arg
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<222> (2557)..(2955)

<400> 18430

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Lys Gln Ala Glu Asp Ala Ala Lys Ser Ile Thr Asn Gly Ser Asp Asp
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Ile Val Asp Ser Asp Glu Glu Asp Ser Ser Asn Asn Ala Asp Val Ser
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Gln Thr Leu Lys Asp Phe Gln Tyr Ile Asp Arg Asp Gly Lys Asp Gln
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Gly Ile Asn Val Arg Glu Lys Ser Lys Gln Leu Val Ala Leu Leu Lys
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Thr Ser Pro Arg Val Ser Ser Glu Leu Glu Gln Ala Arg Pro Gln Thr
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Ser Gly Glu Glu Glu Leu Gln Leu Gln Leu Ala Leu Ala Met Ser Arg
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Glu Val Ala Glu Gln Glu Glu Arg Leu Arg Arg Gly Asp Asp Leu Arg
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Lys Lys Lys Glu His Gly Ser Leu Pro Gln Gln Thr Thr Leu Leu Asp
225                 230                 235                 240
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<211> 2197
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (211)..(876)

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<210> 18445
<211> 222
<212> PRT
<213> Homo sapiens

<400> 18445
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Lys Asp Asp Phe Met Gly Gln Ala Leu Gly Ser Pro Ala Leu Cys Arg
        35                  40                  45
Leu Gln Thr Trp Tyr Pro Ala Phe Gln Lys Leu Gln Pro Cys Leu Lys
    50                  55                  60
Glu Ala Lys Val Gln Leu Gly Phe Trp Leu Gln Arg Val Glu Val Gln
65                  70                  75                  80
Gly Ile Gly Ser Phe His Gly Val Leu Ser Leu Gln Gly His Arg Ser
                85                  90                  95
Gln Leu Leu Arg Leu Gly Asn Leu His Leu Asp Phe Lys Arg Cys Met
            100                 105                 110
Glu Met Pro Asp Asp Gln Ala Glu Val Cys Cys Ile Gly Gly Pro Ser
        115                 120                 125
Trp Arg Thr Ser Ala Arg Ala Val Trp Lys Gly Asn Val Gly Leu Glu
    130                 135                 140
Pro Pro His Arg Val Pro Thr Val Ala Leu Pro Ser Gly Ala Val Arg
145                 150                 155                 160
Arg Gly Pro Leu Ser Ser Arg Pro Leu Asn Gly Arg Ser Thr Asp Ser
                165                 170                 175
Leu His Cys Ala Pro Glu Lys Ala Ala Asp Thr Gln Cys Gln Pro Met
            180                 185                 190
Arg Ala Ala Gly Arg Glu Ala Ile Pro Cys Lys Thr Thr Gly Ala Asp
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Cys Pro Arg Leu Cys Glu Pro Ala Ser Cys Ile Ser Leu Thr
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<210> 18446
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<212> DNA
<213> Homo sapiens

<400> 18446

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cgatctcggc tcactacagc ctctgcctcc ctggttcaag cagttctcct gcctcagcct 240
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aaattagctg ggcgtggtgg cgggcgcctg taatcccaga tactcgggag gctaaggcag 960
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<210> 18447
<211> 2336
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1775)..(2077)

<400> 18447
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cgcttgaacc cgggaggctg aagttgcagt gagccaagat cgtgccacta cactccagcc 480
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gcctgatcaa catggtgata ccccatctct actaaaaata caaaattagc caggcgtgtt 660
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<210> 18448
<211> 101
<212> PRT
<213> Homo sapiens

<400> 18448
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Phe Ser Pro Pro Glu Pro Ala Gly Thr Val Leu Asp His Ser Asn Thr
20 25 30
Ser Leu Leu Ser Ala Ser Trp Gln Ser Arg Cys Pro Cys Gly Gly Ser
35 40 45
Cys Val Val Gly Asp Ser Trp Glu Trp Glu Ser Thr Leu Leu Gln His
50 55 60
Glu Gly Glu Ile Leu Phe Gln Leu Pro Gln Thr Arg Pro Thr Leu Leu
65 70 75 80
Val Tyr Ser Ala Thr Asn Lys Asn Glu Asp Ile Thr Leu Ala Gly Arg
85 90 95
Gly Gly Ser Arg Leu
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<210> 18449
<211> 1510
<212> DNA
<213> Homo sapiens

<220>
<221> CDS

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<222> (352)..(1506)

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<210> 18450
<211> 385
<212> PRT
<213> Homo sapiens

<400> 18450
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20 25 30
Phe Thr Tyr Thr Thr Asp Lys Gln Ser Ser Lys Glu Asn Thr Arg Thr
35 40 45
Val Glu Lys Leu Tyr Lys Cys Ser Val Asp Ile Arg Lys Ile Arg Arg
50 55 60
Leu Lys Gly Trp Val Leu Leu Glu Asp Glu Thr Tyr Val Glu Glu Ile
65 70 75 80
Ala Asn Ile Leu Gln Glu Leu Gly Ala Asp Glu Thr Ala Val Ala Ser

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Ile Leu Glu Arg Cys Pro Glu Ala Ile Val Cys Ser Pro Thr Ala Val
            100                 105                 110
Asn Thr Gln Arg Lys Leu Trp Gln Leu Val Cys Lys Asn Glu Glu Glu
        115                 120                 125
Leu Ile Lys Leu Ile Glu Gln Phe Pro Glu Ser Phe Phe Thr Ile Lys
    130                 135                 140
Asp Gln Glu Asn Gln Lys Leu Asn Val Gln Phe Phe Gln Glu Leu Gly
145                 150                 155                 160
Leu Lys Asn Val Val Ile Ser Arg Leu Leu Thr Ala Ala Pro Asn Val
                165                 170                 175
Phe His Asn Pro Val Glu Lys Asn Lys Gln Met Val Arg Ile Leu Gln
            180                 185                 190
Glu Ser Tyr Leu Asp Val Gly Gly Ser Glu Ala Asn Met Lys Val Trp
        195                 200                 205
Leu Leu Lys Leu Leu Ser Gln Asn Pro Phe Ile Leu Leu Asn Ser Pro
    210                 215                 220
Thr Ala Ile Lys Glu Thr Leu Glu Phe Leu Gln Gly Gln Gly Phe Thr
225                 230                 235                 240
Ser Phe Glu Ile Leu Gln Leu Leu Ser Lys Leu Lys Gly Phe Leu Phe
                245                 250                 255
Gln Leu Cys Pro Arg Ser Ile Gln Asn Ser Ile Ser Phe Ser Lys Asn
            260                 265                 270
Ala Phe Lys Cys Thr Asp His Asp Leu Lys Gln Leu Val Leu Lys Cys
        275                 280                 285
Pro Ala Leu Leu Tyr Tyr Ser Val Pro Val Leu Glu Glu Arg Met Gln
    290                 295                 300
Gly Leu Leu Arg Glu Gly Ile Ser Ile Ala Gln Ile Arg Glu Thr Pro
305                 310                 315                 320
Met Val Leu Glu Leu Thr Pro Gln Ile Val Gln Tyr Arg Ile Arg Lys
                325                 330                 335
Leu Asn Ser Ser Gly Tyr Arg Ile Lys Asp Gly His Leu Ala Asn Leu
            340                 345                 350
Asn Gly Ser Lys Lys Glu Phe Glu Ala Asn Phe Gly Lys Ile Gln Ala
        355                 360                 365
Lys Lys Val Arg Pro Leu Phe Asn Pro Val Ala Pro Leu Asn Val Glu
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385
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<211> 1449
<212> DNA
<213> Homo sapiens

<220>
<221> CDS

<222> (118)..(459)

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aaaatcaata aggaaacatt ggacttgaac tacacattag accatgggtg tccaatcttt 420
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aatttgtgtt gggtcacatt caaagccatc ctgggccgca tgtagcccat gggccatggg 600
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Gln Lys Ile Asn Lys Glu Thr Leu Asp Leu Asn Tyr Thr Leu Asp His
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Pro Gly Leu Ile Val Ser Ala Met Pro Ala Ile Val Tyr Gln Cys Asn
465                 470                 475                 480
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Asn Tyr Ile His Asn Gly Lys Lys Ser Arg Ala Leu Ser Pro Leu Ser
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625                 630                 635                 640
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Asp	Phe	Gln	Asn	Lys	Glu	Cys	Ser	Arg	Pro	Asn	Cys	Arg	Phe	Ile	His
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Gly	Ser	Lys	Glu	Asp	Glu	Asp	Gly	Tyr	Lys	Lys	Thr	Gly	Glu	Leu	Pro
			100					105					110		
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Ala Pro Ala Ala Pro Pro Thr Asn Ala Ala Pro Pro Ala Ala Pro Pro
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Pro Pro Pro Pro His Leu Thr Pro Glu Ile Thr Pro Leu Ser Ala Ala
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<212> PRT
<213> Homo sapiens

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Ser Val Asp Gln Cys Trp Leu Gln Ala Leu Gln Phe Ser Val His Leu
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Ile His Leu Leu Ser Ile Leu Val Ile Cys Asn Gly Phe Ala Gly Ile

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<212> PRT
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Pro Arg Ser His Phe Phe Pro Phe Asp Leu Phe Pro Met Cys Pro Phe
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Gly Cys Gln Cys Tyr Ser Arg Val Val His Cys Ser Asp Leu Gly Leu
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Thr Ser Val Pro Thr Asn Ile Pro Phe Asp Thr Arg Met Leu Asp Leu
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Gln Asn Asn Lys Ile Lys Glu Ile Lys Glu Asn Asp Phe Lys Gly Leu
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Ser His Asn Gln Leu Ser Glu Ile Pro Leu Asn Leu Pro Lys Ser Leu
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530 535 540
Ala Leu Ser Ala Ala Gln Leu Tyr Tyr Leu Leu Ile Arg Thr Met Lys
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<400> 18476

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<400> 18477

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Phe Glu Met Pro Thr Val Cys Thr Thr Ile Lys Val Ser Lys Asp Gly
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Gln Tyr Ile Leu Ala Thr Gly Thr Tyr Lys Pro Arg Val Arg Cys Tyr
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Asp Thr Tyr Gln Leu Ser Leu Lys Phe Glu Arg Cys Leu Asp Ser Glu
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Val Val Thr Phe Glu Ile Leu Ser Asp Asp Tyr Ser Lys Ile Val Phe
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Phe Ile Gly Pro Leu Pro Arg Glu Gly Ser Val Gly Ser Thr Ser Asp
65                  70                  75                  80
Tyr Val Ser Gln Ser Tyr Ser Tyr Ser Ser Ile Leu Asn Lys Ser Glu
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Thr Gly Tyr Val Gly Leu Val Asn Gln Ala Met Thr Cys Tyr Leu Asn
            100                 105                 110
Ser Leu Leu Gln Thr Leu Phe Met Thr Pro Glu Phe Arg Asn Ala Leu
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    130                 135                 140
Pro Tyr Gln Leu Gln Arg Leu Phe Val Leu Leu Gln Thr Ser Lys Lys
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Arg Ala Ile Glu Thr Thr Asp Val Thr Arg Ser Phe Gly Trp Asp Ser
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Ser Glu Ala Trp Gln Gln His Asp Val Gln Glu Leu Cys Arg Val Met
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Phe Asp Ala Leu Glu Gln Lys Trp Lys Gln Thr Glu Gln Ala Asp Leu
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Gln Tyr Phe Cys Glu Arg Cys Lys Lys Lys Cys Asp Ala Arg Lys Gly
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Asp Glu Lys Ser Pro Gln Thr Glu Ser Cys Thr Asp Ser Gly Ala Glu
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Asn Glu Gly Ser Cys His Ser Asp Gln Met Ser Asn Asp Phe Ser Asn
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Asp Gln His Val Ser Arg Ile Thr Gln Glu Asp Ile Lys Lys Thr His
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Gly Gly Ser Ser Gly Ser Arg Gly Tyr Tyr Ser Ser Ala Phe Ala Ser
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465                 470                 475                 480
Asn Ala Lys Phe Leu Glu Val Gly Glu Tyr Pro Glu His Ile Lys Asn
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Leu Val Gln Lys Glu Arg Glu Leu Glu Glu Gln Glu Lys Arg Gln Arg
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Glu Ile Glu Arg Asn Thr Cys Lys Ile Lys Leu Phe Cys Leu His Pro
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Thr Lys Gln Val Met Met Glu Asn Lys Leu Glu Val His Lys Asp Lys
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545                 550                 555                 560
Glu Val Ile Pro Leu Asp Cys Cys Arg Leu Val Lys Tyr Asp Glu Phe
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His Asp Tyr Leu Glu Arg Ser Tyr Glu Gly Glu Glu Asp Thr Pro Met
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Gly Leu Leu Leu Gly Gly Val Lys Ser Thr Tyr Met Phe Asp Leu Leu
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Leu Glu Thr Arg Lys Pro Asp Gln Val Phe Gln Ser Tyr Lys Pro Gly
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Phe Lys Gln Leu Ile Ser Lys Ala Ile His Leu Pro Ala Glu Thr Met
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Arg Ile Val Leu Glu Arg Cys Tyr Asn Asp Leu Arg Leu Leu Ser Val
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Ser His Leu Trp Lys Leu Leu Asp Arg His Ala Asn Thr Ile Arg Leu
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Phe Val Leu Leu Pro Glu Gln Ser Pro Val Ser Tyr Ser Lys Arg Thr
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Val Asp Asn Arg Glu Leu Glu Gln His Ile Gln Thr Ser Asp Pro Glu
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Ser Thr Ser Ser Val Asp Ser Asp Ile Leu Ser Ser Ser His Ser Ser
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Val Phe Ala Lys Gly Met Thr Val Arg Gln Ser Lys Glu Glu Leu Ile
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Pro Gln Leu Arg Glu Gln Cys Gly Leu Glu Leu Ser Ile Asp Arg Phe
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Arg Leu Arg Lys Lys Thr Trp Lys Asn Pro Gly Thr Val Phe Leu Asp
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Tyr His Ile Tyr Glu Glu Asp Ile Asn Ile Ser Ser Asn Trp Glu Val
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<400> 18483

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         35                  40                  45
Ile Thr Asp Val His His Gln Ala Trp Leu Ile Phe Val Phe Leu Val
     50                  55                  60
Glu Thr Gly Phe Ser His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr
 65                  70                  75                  80
Ser Ser Asp Pro Leu Thr Ser Ala Leu Trp Glu Ala Ser Ala Gly Gly
                 85                  90                  95
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Lys Tyr Gln Val Ser Glu Glu Val Pro Ser Gly Thr Val Ile Gly Lys
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Leu Ser Gln Glu Leu Gly Arg Glu Glu Arg Arg Arg Gln Ala Gly Ala
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Ala Phe Gln Val Leu Gln Leu Pro Gln Ala Leu Pro Ile Gln Val Asp
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Ser Glu Ser Ala Ser Leu Arg Thr Arg Ile Pro Leu Asp Arg Ala Leu
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Asp Pro Asp Thr Gly Pro Asn Thr Leu His Thr Tyr Thr Leu Ser Pro
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Ser Glu His Phe Ala Leu Asp Val Ile Val Gly Pro Asp Glu Thr Lys
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His Ala Glu Leu Ile Val Val Lys Glu Leu Asp Arg Glu Ile His Ser
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Phe Phe Asp Leu Val Leu Thr Ala Tyr Asp Asn Gly Asn Pro Pro Lys
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Ser Gly Thr Ser Leu Val Lys Val Asn Val Leu Asp Ser Asn Asp Asn
225                 230                 235                 240
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Ala Ala Pro Gly Thr Leu Leu Ile Lys Leu Thr Ala Thr Asp Pro Asp
            260                 265                 270
Gln Gly Pro Asn Gly Glu Val Glu Phe Phe Leu Ser Lys His Met Pro
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Pro Glu Val Leu Asp Thr Phe Ser Ile Asp Ala Lys Thr Gly Gln Val
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Asp Val Gln Ala Arg Asp Leu Gly Pro Asn Pro Ile Pro Ala His Cys
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Lys Asp Ser Phe Ile Ala Leu Val Met Ala Asp Asp Leu Asp Ser Gly
    370                 375                 380
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                405                 410                 415
Thr Leu Asp Arg Glu Gln Trp Pro Lys Tyr Thr Leu Thr Leu Leu Ala
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Gln Asp Gln Gly Leu Gln Pro Leu Ser Ala Lys Lys Gln Leu Ser Ile
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Gln Ile Ser Asp Ile Asn Asp Asn Ala Pro Val Phe Glu Lys Ser Arg
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0050200-0050450

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<400> 18487

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Lys Lys Arg Arg Leu His Pro Pro Glu Asp Pro Lys Leu Arg Leu Leu
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Lys Lys Val Asp Ala Arg Glu Glu Glu Ser Ile Gln Glu Ile Gln Arg
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Val Leu Glu Asn Asp Glu Asn Val Glu Glu Gly Asn Glu Glu Glu Asp
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Leu Glu Glu Asp Ile Pro Lys Arg Lys Asp Arg Thr Arg Gly Arg Ala
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Arg Cys Pro Leu Pro Ser Leu His Cys Phe Ser Ser Leu Pro Ser Ala
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Cys Ser Ser Leu Thr Gln Val His Arg Val Pro Trp Gly Gln His Arg
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Ala Cys Pro Val Met Leu Leu Val Phe Thr Lys Trp Leu Gln Arg Tyr
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Leu His Phe Glu Lys Pro Ala Glu Pro Ala Ser Val Gly Gln Asp Pro
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Asp Phe Phe Gly Lys Ser Glu Gly Glu Arg Ala Thr Cys Leu Leu Ser
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<213> Homo sapiens

<400> 18492

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Gly Pro Lys Pro Pro Gln Ala Lys Ala Cys Pro Trp Ala His Phe Leu
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Leu Val Leu Ala Val Leu Phe Phe His Gln Leu Val Gly Asp Pro Leu
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Lys Arg Tyr Ala His Ala Leu Val Phe Gly Ile Leu Leu Thr Cys Arg
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35 40 45
Ile Ile His Ile Asp Gly Phe Arg Gln Asn Tyr Leu Cys Asn Ser Ser
50 55 60
Leu Asp Lys Gly Asn Thr Gln Leu Gly Phe Ser Gln Ser Ser Cys Gly

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Thr Asp Gly Cys Pro Arg Ala Phe Leu His Val Lys Arg Thr Thr Val
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Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Cys Asp Pro Pro Ala Ser
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Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu Ser His His Ala Gln Pro
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<213> Homo sapiens

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<211> 217
<212> PRT
<213> Homo sapiens

<400> 18510
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35 40 45
Pro Ala Arg Glu Pro Leu Ala Ala Thr Gly Phe Leu His Gly Leu Gly
50 55 60
His Leu Gly Arg Ala Ala Gln Ser Pro Arg Ala Ser Cys Cys Ile Leu

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Arg Glu Val Gln Thr Val Cys Thr Gly Val Ser Gly Asp Gln Ala Gln
            100                 105                 110
Lys Glu Gln Asp Gly His Leu Leu Ala Trp Arg Lys Ile Leu Leu Pro
        115                 120                 125
Gly Lys Lys Thr Thr Pro Arg Gly Ile Gly Leu Gly Cys Arg Thr Leu
    130                 135                 140
Ser Gln Ala Thr Ala Pro Phe Leu Leu Gln Asn Trp Gly Arg Lys Arg
145                 150                 155                 160
Ala Phe Arg Pro Gly Ser Glu Asn Pro Ser Ser Gly Thr Ser Arg Pro
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Ser Arg Gly Arg Leu Glu Ala Arg Ser Ser Gly Leu Asp Glu Ala Trp
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<400> 18511

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Arg Glu Phe Ser Phe Val Gln Ser Ser Leu Gly Phe Val Ala Leu Val
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Cys Ile Ser Arg Arg Leu Ala Arg Ile Arg Arg Gly Trp Glu Arg Glu
            100                 105                 110
Ser Thr Ile Lys Phe Thr Leu Pro Thr Asp His Ala Leu Ser Pro Leu
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<212> DNA
<213> Homo sapiens

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<400> 18513

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<210> 18514
<211> 942
<212> PRT
<213> Homo sapiens

<400> 18514

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			20					25				30			
Leu	Arg	Val	Pro	Arg	Gln	Val	Arg	Leu	Leu	Gln	Arg	Leu	Lys	Thr	Lys
		35					40					45			
Pro	Leu	Met	Thr	Glu	Phe	Ser	Val	Lys	Ser	Thr	Ile	Ile	Ser	Arg	Tyr
	50					55					60				
Ala	Phe	Thr	Thr	Val	Ser	Cys	Arg	Met	Leu	Asn	Arg	Ala	Ser	Glu	Asp
65					70					75					80
Gln	Asp	Ile	Glu	Phe	Gln	Met	Gln	Ile	Pro	Ala	Ala	Ala	Phe	Ile	Thr
				85					90					95	
Asn	Phe	Thr	Met	Leu	Ile	Gly	Asp	Lys	Val	Tyr	Gln	Gly	Glu	Ile	Thr

0 056 946 · 0 2 0 2 8 0 0

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                100                 105                 110
Glu Arg Glu Lys Lys Ser Gly Asp Arg Val Lys Glu Lys Arg Asn Lys
        115                 120                 125
Thr Thr Glu Glu Asn Gly Glu Lys Gly Thr Glu Ile Phe Arg Ala Ser
    130                 135                 140
Ala Val Ile Pro Ser Lys Asp Lys Ala Ala Phe Phe Leu Ser Tyr Glu
145                 150                 155                 160
Glu Leu Leu Gln Arg Arg Leu Gly Lys Tyr Glu His Ser Ile Ser Val
                165                 170                 175
Arg Pro Gln Gln Leu Ser Gly Arg Leu Ser Val Gly Val Asn Ile Leu
            180                 185                 190
Glu Ser Ala Gly Ile Ala Ser Leu Glu Val Leu Pro Leu His Asn Ser
        195                 200                 205
Arg Gln Arg Gly Ser Gly Arg Gly Glu Asp Asp Ser Gly Pro Pro Pro
    210                 215                 220
Ser Thr Val Ile Asn Gln Asn Glu Thr Phe Ala Asn Ile Ile Phe Lys
225                 230                 235                 240
Pro Thr Val Val Gln Gln Ala Arg Ile Ala Gln Asn Gly Ile Leu Gly
                245                 250                 255
Asp Phe Ile Ile Arg Tyr Asp Val Asn Arg Glu Gln Ser Ile Gly Asp
            260                 265                 270
Ile Gln Val Leu Asn Gly Tyr Phe Val His Tyr Phe Ala Pro Lys Asp
        275                 280                 285
Leu Pro Pro Leu Pro Lys Asn Val Val Phe Val Leu Asp Ser Ser Ala
    290                 295                 300
Ser Met Val Gly Thr Lys Leu Arg Gln Thr Lys Asp Ala Leu Phe Thr
305                 310                 315                 320
Ile Leu His Asp Leu Arg Pro Gln Asp Arg Phe Ser Ile Ile Gly Phe
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Pro Asn Arg Ile Lys Val Trp Lys Asp His Leu Ile Ser Val Thr Pro
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Asp Ser Ile Arg Asp Gly Lys Val Tyr Ile His His Met Ser Pro Thr
        355                 360                 365
Gly Gly Thr Asp Ile Asn Gly Ala Leu Gln Arg Ala Ile Arg Leu Leu
    370                 375                 380
Asn Lys Tyr Val Ala His Ser Gly Ile Gly Asp Arg Ser Val Ser Leu
385                 390                 395                 400
Ile Val Phe Leu Thr Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr
                405                 410                 415
Leu Lys Ile Leu Asn Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys
            420                 425                 430
Ile Phe Thr Ile Gly Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu
        435                 440                 445
Lys Leu Ser Leu Glu Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu
    450                 455                 460
Glu Asp Ala Gly Ser Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr
465                 470                 475                 480
Pro Leu Leu Ser Asp Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val Val
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                485                 490                 495
Gln Ala Thr Lys Thr Leu Phe Pro Asn Tyr Phe Asn Gly Ser Glu Ile
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Ile Ile Ala Gly Lys Leu Val Asp Arg Lys Leu Asp His Leu His Val
        515                 520                 525
Glu Val Thr Ala Ser Asn Ser Lys Lys Phe Ile Ile Leu Lys Thr Asp
    530                 535                 540
Val Pro Val Arg Pro Gln Lys Ala Gly Lys Asp Val Thr Gly Ser Pro
545                 550                 555                 560
Arg Pro Gly Gly Asp Gly Glu Gly Asp Pro Asn His Ile Glu Arg Leu
                565                 570                 575
Trp Ser Tyr Leu Thr Thr Lys Glu Leu Leu Ser Ser Trp Leu Gln Ser
            580                 585                 590
Asp Asp Glu Pro Glu Lys Glu Arg Leu Arg Gln Arg Ala Gln Ala Leu
        595                 600                 605
Ala Val Ser Tyr Arg Phe Leu Thr Pro Phe Thr Ser Met Lys Leu Arg
    610                 615                 620
Gly Pro Val Pro Arg Met Asp Gly Leu Glu Glu Ala His Gly Met Ser
625                 630                 635                 640
Ala Ala Met Gly Pro Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly
                645                 650                 655
Thr Gln Pro Gly Pro Leu Leu Lys Lys Pro Tyr Gln Pro Arg Ile Lys
            660                 665                 670
Ile Ser Lys Thr Ser Val Asp Gly Asp Pro His Phe Val Val Asp Phe
        675                 680                 685
Pro Leu Ser Arg Leu Thr Val Cys Phe Asn Ile Asp Gly Gln Pro Gly
    690                 695                 700
Asp Ile Leu Arg Leu Val Ser Asp His Arg Asp Ser Gly Val Thr Val
705                 710                 715                 720
Asn Gly Glu Leu Ile Gly Ala Pro Ala Pro Pro Asn Gly His Lys Lys
                725                 730                 735
Gln Arg Thr Tyr Leu Arg Thr Ile Thr Ile Leu Ile Asn Lys Pro Glu
            740                 745                 750
Arg Ser Tyr Leu Glu Ile Thr Pro Ser Arg Val Ile Leu Asp Gly Gly
        755                 760                 765
Asp Arg Leu Val Leu Pro Cys Asn Gln Ser Val Val Val Gly Ser Trp
    770                 775                 780
Gly Leu Glu Val Ser Val Ser Ala Asn Ala Asn Val Thr Val Thr Ile
785                 790                 795                 800
Gln Gly Ser Ile Ala Phe Val Ile Leu Ile His Leu Tyr Lys Lys Pro
                805                 810                 815
Ala Pro Phe Gln Arg His His Leu Gly Phe Tyr Ile Ala Asn Ser Glu
            820                 825                 830
Gly Leu Ser Ser Asn Cys His Gly Leu Leu Gly Gln Phe Leu Asn Gln
        835                 840                 845
Asp Ala Arg Leu Thr Glu Asp Pro Ala Gly Pro Ser Gln Asn Leu Thr
    850                 855                 860
His Pro Leu Leu Leu Gln Val Gly Glu Gly Pro Glu Ala Val Leu Thr
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Val Lys Gly His Gln Val Pro Val Val Trp Lys Gln Arg Lys Ile Tyr
                885                 890                 895
Asn Gly Glu Glu Gln Ile Asp Cys Trp Phe Ala Arg Asn Asn Ala Ala
            900                 905                 910
Lys Leu Ile Asp Gly Glu Tyr Lys Asp Tyr Leu Ala Ser His Pro Phe
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Asp Thr Gly Met Thr Leu Gly Gln Gly Met Ser Arg Glu Leu
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (76)..(621)

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tggctggccc tgctgctgtg ggtctcagcc ctgagctgtt ctttctcctt gccagcttct 180
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ggtcttgata aatgcaatgc ctgcatcggg acatctattt gcaagaagtt ctttaaagaa 300
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<210> 18516
<211> 182
<212> PRT
<213> Homo sapiens

<400> 18516

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Leu	Ala	Leu	Leu	Leu	Trp	Val	Ser	Ala	Leu	Ser	Cys	Ser	Phe	Ser	Leu	
			20					25					30			
Pro	Ala	Ser	Ser	Leu	Ser	Ser	Leu	Val	Pro	Gln	Val	Arg	Thr	Ser	Tyr	
		35					40					45				
Asn	Phe	Gly	Arg	Thr	Phe	Leu	Gly	Leu	Asp	Lys	Cys	Asn	Ala	Cys	Ile	
	50					55					60					
Gly	Thr	Ser	Ile	Cys	Lys	Lys	Phe	Phe	Lys	Glu	Glu	Ile	Arg	Ser	Asp	
65					70					75						80
Asn	Trp	Leu	Ala	Ser	His	Leu	Gly	Leu	Pro	Pro	Asp	Ser	Leu	Leu	Ser	
				85					90					95		
Tyr	Pro	Ala	Asn	Tyr	Ser	Asp	Asp	Ser	Lys	Ile	Trp	Arg	Pro	Val	Glu	
			100					105					110			
Ile	Phe	Arg	Leu	Val	Ser	Lys	Tyr	Gln	Asn	Glu	Ile	Ser	Asp	Arg	Lys	
		115					120					125				
Ile	Cys	Ala	Ser	Ala	Ser	Ala	Pro	Lys	Thr	Cys	Ser	Ile	Glu	Arg	Val	
	130					135					140					
Leu	Arg	Lys	Thr	Glu	Arg	Phe	Gln	Lys	Trp	Leu	Gln	Ala	Lys	Arg	Leu	
145					150					155						160
Thr	Pro	Asp	Leu	Val	Gln	Asp	Cys	His	Gln	Gly	Gln	Arg	Glu	Leu	Lys	
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Phe	Leu	Cys	Met	Leu	Arg											
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0080208.0050200

<210> 18517
<211> 1605
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (77)..(1558)

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<211> 494
<212> PRT
<213> Homo sapiens

<400> 18518
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Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Ser Phe
            35                  40                  45
Ser Thr Tyr Ala Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
        50                  55                  60
Glu Trp Val Ser Ser Ile Ser Ser Arg Ser Asp Tyr Ile Tyr Tyr Arg
65                  70                  75                  80
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
                85                  90                  95
Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Val Asp Asp Thr Ala Val
            100                 105                 110
Tyr Tyr Cys Ala Arg Asp Ser Cys Asn Gly Ala Ile Cys Tyr Gly Phe
        115                 120                 125
Ser Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Pro
    130                 135                 140
Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr Gln Pro Asp
145                 150                 155                 160
Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly Phe Phe Pro Gln Glu
                165                 170                 175
Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val Thr Ala Arg
            180                 185                 190
Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp Leu Tyr Thr Thr Ser
        195                 200                 205
Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Leu Ala Gly Lys Ser Val
    210                 215                 220
Thr Cys His Val Lys His Tyr Thr Asn Pro Ser Gln Asp Val Thr Val
225                 230                 235                 240
Pro Cys Pro Val Pro Ser Thr Pro Pro Thr Pro Ser Pro Ser Thr Pro
                245                 250                 255
Pro Thr Pro Ser Pro Ser Cys Cys His Pro Arg Leu Ser Leu His Arg
            260                 265                 270
Pro Ala Leu Glu Asp Leu Leu Leu Gly Ser Glu Ala Asn Leu Thr Cys
        275                 280                 285
Thr Leu Thr Gly Leu Arg Asp Ala Ser Gly Val Thr Phe Thr Trp Thr
    290                 295                 300
Pro Ser Ser Gly Lys Ser Ala Val Gln Gly Pro Pro Glu Arg Asp Leu
305                 310                 315                 320
Cys Gly Cys Tyr Ser Val Ser Ser Val Leu Pro Gly Cys Ala Glu Pro
                325                 330                 335
Trp Asn His Gly Lys Thr Phe Thr Cys Thr Ala Ala Tyr Pro Glu Ser
            340                 345                 350
Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys Ser Gly Asn Thr Phe Arg
        355                 360                 365
Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu Ala Leu Asn
    370                 375                 380
Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser Pro Lys Asp
385                 390                 395                 400
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0960450.0708

Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro Arg Glu Lys
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Tyr Leu Thr Trp Ala Ser Arg Gln Glu Pro Ser Gln Gly Thr Thr Thr
420 425 430
Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp Trp Lys Lys
435 440 445
Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu Pro Leu Ala
450 455 460
Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val
465 470 475 480
Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys Tyr
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<211> 2666
<212> DNA
<213> Homo sapiens

<220>
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<222> (32)..(2293)

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35 40 45
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Lys Gly Phe Leu Asp Lys Gln Gly Phe Tyr Val Ala Leu Arg Leu Val
65 70 75 80
Ala Cys Ala Gln Ser Gly His Glu Val Thr Leu Ser Asn Leu Asn Leu
85 90 95
Ser Met Pro Pro Pro Lys Phe His Asp Thr Ser Ser Pro Leu Met Val
100 105 110
Thr Pro Pro Ser Ala Glu Ala His Trp Ala Val Arg Val Glu Glu Lys
115 120 125
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Asp Leu Asp Gly Tyr Val Ser Gly Gln Glu Val Lys Glu Ile Phe Met
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Pro Phe Gly Gly Asp Pro Phe Lys Glu Ser Asp Pro Phe Arg Gly Ser
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Phe Glu Ser Ser Asp Pro Phe Ser Ser Ser Ser Val Ser Ser Lys Gly
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Ser Asp Pro Phe Gly Thr Leu Asp Pro Phe Gly Ser Gly Ser Phe Asn
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<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 18522

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Ser	Ser	Leu	Gln	Leu	Glu	Gly	Ala	Gly	His	Val	Gly	Met	Cys	Pro	Ser
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<212> DNA
<213> Homo sapiens

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<212> PRT
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35 40 45
Gly Pro Thr Ala Val Gly Asn Gly His Met Ala Gly Pro Leu Leu Pro
50 55 60

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0056456-020800

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                 85                  90                  95
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            100                 105                 110
Pro Arg Gly Lys Ser Cys Cys His Val Pro Pro His Gly Pro Ala Ser
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Ala Pro Pro Cys Ala Val Thr Ala Thr Pro Pro Gly Gln Gly Val Leu
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His Ala Ser Ser Phe Thr Gly Leu Pro Asn Pro Glu Ala Ala Val Glu
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Pro Pro Pro Ala Gln Asp Asn Trp Pro Glu Met Gly Glu Gly Gly Gly
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<212> DNA
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Gly Ala His Phe Pro Arg Arg Ala Ser Leu Glu Gly Gly Ala Ser Gln
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Pro Trp Asp Gln Cys Pro Ser Pro Ala Cys Gln Phe Pro Phe Ser Leu
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<213> Homo sapiens

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Ala His Gly Val Val Ile Val Phe Asn Ala Asp Ile Pro Ser His Arg
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Lys Glu Met Glu Met Trp Tyr Ser Cys Phe Val Gln Gln Pro Ser Leu
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Gln Asp Thr Gln Cys Met Leu Ile Ala His His Lys Pro Gly Ser Gly
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<210> 18550
<211> 166
<212> PRT
<213> Homo sapiens

<400> 18550

0050250.0050

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             20                  25                  30
Ser Val Ser Pro Thr Phe Ser Ser Arg Pro Ser Tyr Pro Arg Val Val
         35                  40                  45
Phe Leu Thr Trp Ala Val Ser Leu Thr Ser Cys Val Pro Pro Cys Pro
     50                  55                  60
Ser Pro Glu Pro Lys Val Val Phe Ala Lys Glu Gln Pro Ala His Arg
 65                  70                  75                  80
Glu Val Gln Ala Glu Ala Gly Ala Ser Ala Thr Leu Ser Cys Glu Val
                 85                  90                  95
Ala Gln Ala Gln Thr Glu Val Thr Trp Tyr Lys Asp Gly Lys Lys Leu
            100                 105                 110
Ser Ser Ser Ser Lys Val Arg Val Glu Ala Val Gly Cys Thr Arg Arg
        115                 120                 125
Leu Val Val Gln Gln Ala Gly Gln Ala Glu Ala Gly Glu Tyr Ser Cys
    130                 135                 140
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0606050-020800

<210> 18551
<211> 1734
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (498)..(956)

<400> 18551

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<211> 153
<212> PRT
<213> Homo sapiens

<400> 18552
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Ala Arg Pro Glu Cys Asp Ser Gly Gly Glu Lys Gln Trp Leu Ser Glu
35 40 45
Glu Ala Glu Asn Leu Cys Ser Leu Leu Pro Gly Thr Pro Leu Gly Ser
50 55 60
His Thr Val Glu Arg Gly Cys Asn Thr Pro Ser Arg Gln Glu Gly Leu
65 70 75 80
Leu Tyr Cys Pro Gly Arg Glu Cys Arg Ser Gly Gly Trp Asp Leu Ser
85 90 95
Ile His Thr Leu Leu Pro Gly Pro Val Trp Asp Leu Ala Gln Ala Pro
100 105 110
Ser Pro Ser Asp Ala Ser Asp Ser Glu Glu Ser Asn Phe Leu Pro Leu
115 120 125
Ser Leu Gln Asp Trp Arg Ala Trp Lys Tyr Ser Glu Gly Cys Gly Val
130 135 140
Asp Arg Ser Phe Arg Gln Gly Thr Arg
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<210> 18553
<211> 2522
<212> DNA

0050345.0702800

<213> Homo sapiens

<220>
<221> CDS
<222> (474)..(2330)

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<210> 18554
<211> 619
<212> PRT
<213> Homo sapiens

<400> 18554

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             20                  25                  30
Ser Thr Asp Cys Asn Ser Glu Ser Ser Ser Gly Gly Lys Ser Gln Glu
         35                  40                  45
Leu Asn Phe Val Met Asp Val Asn Ser Ser Lys Tyr Pro Ser Leu Leu
     50                  55                  60
Leu His Ser Gln Glu Glu Lys Thr Ser Thr Ala Thr Ser Lys Thr Gln
 65                  70                  75                  80
Thr Arg Leu Glu Gly Glu Val Thr Pro Asn Ser Leu Ser Thr Ser Tyr
                 85                  90                  95
Lys Thr Val Ser Leu Pro Leu Ser Ser Pro Asn Ile Lys Leu Asn Leu
            100                 105                 110
Thr Ser Pro Lys Arg Gly Gln Lys Arg Glu Glu Gly Trp Lys Glu Val
        115                 120                 125
Val Arg Arg Ser Lys Lys Leu Ser Val Pro Ala Ser Val Val Ser Arg
    130                 135                 140
Ile Met Gly Arg Gly Gly Cys Asn Ile Thr Ala Ile Gln Asp Val Thr
145                 150                 155                 160
Gly Ala His Ile Asp Val Asp Lys Gln Lys Asp Lys Asn Gly Glu Arg
                165                 170                 175
Met Ile Thr Ile Arg Gly Gly Thr Glu Ser Thr Arg Tyr Ala Val Gln
            180                 185                 190
Leu Ile Asn Ala Leu Ile Gln Asp Pro Ala Lys Glu Leu Glu Asp Leu
        195                 200                 205
Ile Pro Lys Asn His Ile Arg Thr Pro Ala Ser Thr Lys Ser Ile His
    210                 215                 220
Ala Asn Phe Ser Ser Gly Val Gly Thr Thr Ala Ala Ser Ser Lys Asn
225                 230                 235                 240
Ala Phe Pro Leu Gly Ala Pro Thr Leu Val Thr Ser Gln Ala Thr Thr
                245                 250                 255
Leu Ser Thr Phe Gln Pro Ala Asn Lys Leu Asn Lys Asn Val Pro Thr
            260                 265                 270
Asn Val Arg Ser Ser Phe Pro Val Ser Leu Pro Leu Ala Tyr Pro His
        275                 280                 285
Pro His Phe Ala Leu Leu Ala Ala Gln Thr Met Gln Gln Ile Arg His
    290                 295                 300
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0605050.0050800

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Pro Arg Leu Pro Met Ala Gln Phe Gly Gly Thr Phe Ser Pro Ser Pro
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Asn Thr Trp Gly Pro Phe Pro Val Arg Pro Val Asn Pro Gly Asn Thr
                325                 330                 335
Asn Ser Ser Pro Lys His Asn Asn Thr Ser Arg Leu Pro Asn Gln Asn
            340                 345                 350
Gly Thr Val Leu Pro Ser Glu Ser Ala Gly Leu Ala Thr Ala Ser Cys
        355                 360                 365
Pro Ile Thr Val Ser Ser Val Val Ala Ala Ser Gln Gln Leu Cys Val
    370                 375                 380
Thr Asn Thr Arg Thr Pro Ser Ser Val Arg Lys Gln Leu Phe Ala Cys
385                 390                 395                 400
Val Pro Lys Thr Ser Pro Pro Ala Thr Val Ile Ser Ser Val Thr Ser
                405                 410                 415
Thr Cys Ser Ser Leu Pro Ser Val Ser Ser Ala Pro Ile Thr Ser Gly
            420                 425                 430
Gln Ala Pro Thr Thr Phe Leu Pro Ala Ser Thr Ser Gln Ala Gln Leu
        435                 440                 445
Ser Ser Gln Lys Met Glu Ser Phe Ser Ala Val Pro Pro Thr Lys Glu
    450                 455                 460
Lys Val Ser Thr Gln Asp Gln Pro Met Ala Asn Leu Cys Thr Pro Ser
465                 470                 475                 480
Ser Thr Ala Asn Ser Cys Ser Ser Ser Ala Ser Asn Thr Pro Gly Ala
                485                 490                 495
Pro Glu Thr His Pro Ser Ser Ser Pro Thr Pro Thr Ser Ser Asn Thr
            500                 505                 510
Gln Glu Glu Ala Gln Pro Ser Ser Val Ser Asp Leu Ser Pro Met Ser
        515                 520                 525
Met Pro Phe Ala Ser Asn Ser Glu Pro Ala Pro Leu Thr Leu Thr Ser
    530                 535                 540
Pro Arg Met Val Ala Ala Asp Asn Gln Asp Thr Ser Asn Leu Pro Gln
545                 550                 555                 560
Leu Ala Val Pro Ala Pro Arg Val Ser His Arg Met Gln Pro Arg Gly
                565                 570                 575
Ser Phe Tyr Ser Met Val Pro Asn Ala Thr Ile His Gln Asp Pro Gln
            580                 585                 590
Ser Ile Phe Val Thr Asn Pro Val Thr Leu Trp Glu Ala Glu Val Gly
        595                 600                 605
Gly Ser Leu Glu Val Arg Ser Leu Arg Pro Val
    610                 615
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<210> 18555
<211> 2260
<212> DNA
<213> Homo sapiens

<220>

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<221> CDS
<222> (1334)..(2122)

<400> 18555
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<210> 18556
<211> 263
<212> PRT
<213> Homo sapiens

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0060460-0020800

<400> 18556

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             20                  25                  30
Lys Arg Asn Ala Ala Pro Gln Pro Leu Gln Thr Lys Pro Asn Ser Pro
         35                  40                  45
Ala Arg Gly Trp Ile Thr Gly His Pro Ala Ala Ala Phe Pro Pro Glu
     50                  55                  60
Glu Pro Arg Arg Leu Pro Arg Pro Glu Met Pro Pro Val Trp Leu Cys
 65                  70                  75                  80
Leu Ser Pro Val Pro Arg Gln Leu Gly Gly Ser Ile Pro Lys Gln Met
                 85                  90                  95
His Pro Ala His Asp Gly Thr Pro Gly Thr Pro Ile Leu Arg Thr Leu
            100                 105                 110
Gln Ser Phe Lys Leu Glu Leu Ala Gly Phe Cys Leu Tyr Arg His Arg
        115                 120                 125
Leu Gln Ser Leu Arg Cys Cys Leu Ala Gly Lys Cys Arg Ala Gly Gly
    130                 135                 140
Ala Gly Pro Gln Leu Glu Ala Pro Arg Cys Ser Pro Pro Leu His Cys
145                 150                 155                 160
Arg Ala Gln Gly Gly Gln Glu Gln Pro Gln Gln Gln Gln Lys Pro Asn
                165                 170                 175
Trp Glu Arg Asn Arg Gly Lys Asn Pro His Arg Leu Leu Gly Thr Tyr
            180                 185                 190
Lys Glu Met Pro Thr Ser Ile Leu Leu Thr Trp His Leu Leu Thr Trp
        195                 200                 205
His Leu Leu Gly Cys His Lys Thr Asp Lys Ser Phe His Val Arg Leu
    210                 215                 220
Asp Thr Cys Gln Gly Gly Val Ser Lys Leu Gly His Arg Gln His Pro
225                 230                 235                 240
Arg Pro Gly His Trp Val Glu Glu Thr Val Leu Gly Arg Ser Arg Arg
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<210> 18557
<211> 2692
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (373)..(1494)

<400> 18557

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<213> Homo sapiens

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0962946.0702800

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<212> PRT
<213> Homo sapiens

<400> 18562
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Gly Pro Gly Glu Pro Gly Val Pro Gly Trp Lys Pro Gly Tyr Thr Leu
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Val Arg His Leu Arg Gln Arg Lys Lys Lys Asn Arg Ala Ala Glu Lys
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Arg Gly Leu Gly Pro Pro Leu Thr Lys Val Ser Phe Arg Gln Pro Leu
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<213> Homo sapiens

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<222> (690)..(1781)

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<213> Homo sapiens

<400> 18572

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Ser Pro Ser Leu Arg Leu Asp Thr Pro Ile Phe Val Thr Phe Tyr Gln
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Cys Leu Val Thr Thr Leu Leu Cys Lys Gly Leu Ser Ala Leu Ala Ala
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Val Ala Arg Ser Val Leu Pro Leu Ser Val Val Phe Ile Gly Met Ile
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Thr Phe Asn Asn Leu Cys Leu Lys Tyr Val Gly Val Ala Phe Tyr Asn
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Leu Leu Lys Gln Thr Thr Ser Phe Tyr Ala Leu Leu Thr Cys Gly Ile
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Ile Ile Gly Gly Phe Trp Leu Gly Val Asp Gln Glu Gly Ala Glu Gly
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Thr Leu Ser Trp Leu Gly Thr Val Phe Gly Val Leu Ala Ser Leu Cys
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Val Ser Leu Asn Ala Ile Tyr Thr Thr Lys Val Leu Pro Ala Val Asp
    210                 215                 220
Gly Ser Ile Trp Arg Leu Thr Phe Tyr Asn Asn Val Asn Ala Cys Ile
225                 230                 235                 240
Leu Phe Leu Pro Leu Leu Leu Leu Leu Gly Glu Leu Gln Ala Leu Arg
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Asp Phe Ala Gln Leu Gly Ser Ala His Phe Trp Gly Met Met Thr Leu
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Gly Gly Leu Phe Gly Phe Ala Ile Gly Tyr Val Thr Gly Leu Gln Ile
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<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (1801)..(2814)

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<211> 338
<212> PRT
<213> Homo sapiens

<400> 18574

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Gly Cys Leu Leu Asp Arg Lys Ala Val Gly Thr Pro Ala Gly Gly Gly
         35                  40                  45
Phe Pro Arg Arg His Ser Val Thr Leu Pro Ser Ser Lys Phe His Gln
     50                  55                  60
Asn Gln Leu Leu Ser Ser Leu Lys Gly Glu Pro Ala Pro Ala Leu Ser
 65                  70                  75                  80
Ser Arg Asp Ser Arg Phe Arg Asp Arg Ser Phe Ser Glu Gly Gly Glu
                 85                  90                  95
Arg Leu Leu Pro Thr Arg Lys Gln Pro Gly Gly Gly Gln Val Asn Ser
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Ser Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala
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Phe His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile
                165                 170                 175
His Asn Ala Glu Glu Arg Arg Ala Leu Ala Gly Ala Arg Asp Leu Ser
            180                 185                 190
Ala Asp Arg Pro Arg Leu Gln His Ser Phe Ser Phe Ala Gly Phe Pro
        195                 200                 205
Ser Ala Ala Ala Thr Ala Ala Ala Thr Gly Leu Leu Asp Ser Pro Thr
    210                 215                 220
Ser Ile Thr Pro Pro Pro Ile Leu Ser Ala Asp Asp Leu Leu Gly Ser
225                 230                 235                 240
Pro Thr Leu Pro Asp Gly Thr Asn Asn Pro Phe Ala Phe Ser Ser Gln
                245                 250                 255
Glu Leu Ala Ser Leu Phe Ala Pro Ser Met Gly Leu Pro Gly Gly Gly
            260                 265                 270
Ser Pro Thr Thr Phe Leu Phe Arg Pro Met Ser Glu Ser Pro His Met
        275                 280                 285
Phe Asp Ser Pro Pro Ser Pro Gln Asp Ser Leu Ser Asp Gln Glu Gly
    290                 295                 300
Tyr Leu Ser Ser Ser Ser Ser Ser His Ser Gly Ser Asp Ser Pro Thr
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<211> 2584
<212> DNA
<213> Homo sapiens

<220>
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<222> (2170)..(2529)

<400> 18575
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<211> 120
<212> PRT
<213> Homo sapiens

<400> 18576
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Glu Gln Leu Phe Ser Pro Thr Leu Gly Pro Ser Leu Val Val Ile Lys
65                  70                  75                  80
Thr Pro Gln Ile Ser Ser Ala Ser Cys Ala Leu Gly Tyr Ile Leu Arg
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Ser His Trp Leu Cys Thr Val Ala His Ala Arg Asn Pro Ser Thr Leu
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<210> 18577
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<212> DNA
<213> Homo sapiens

<400> 18577

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<210> 18578
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<212> DNA
<213> Homo sapiens

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Asn Pro Ile Gly Asn Trp Asp Gly Arg Phe Asp Gly Val Gln Leu Cys
50 55 60
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Lys Ser Lys Asn Thr Trp Tyr Ile Asp Glu Val Ala Glu Asp Pro Ala
145 150 155 160
Lys Ser Leu Thr Glu Ile Ser Thr Asp Phe Asp Arg Ser Ser Pro Pro
165 170 175
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Gly His Ser Pro Leu Ser Leu Ser Ala Gln Ser Val Met Glu Glu Leu
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<212> PRT
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<400> 18590

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Met Cys Phe Leu Gly Phe Gly Ser Tyr Phe Cys Tyr Asp Asn Pro Ala
     50                  55                  60
Ala Leu Gln Thr Gln Val Lys Arg Asp Met Gln Val Asn Thr Thr Lys
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<222> (129)..(1640)

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<213> Homo sapiens

<400> 18594

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0082470 09/20/2010

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Phe Tyr Asp Asp Val Thr Val Pro Ser Pro Pro Ser Lys Arg Arg Lys
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<400> 18595

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<212> DNA
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<210> 18600
<211> 193
<212> PRT
<213> Homo sapiens

<400> 18600
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            20                  25                  30
Asp Lys Leu Gly Pro Thr Val Phe Ala Pro Val Lys Met Asp Leu Val
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0050204.0050800

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         35                  40                  45
Glu Asn Ile Lys Lys Val Asn Gln Lys Tyr Ile Thr Asn Lys Glu Glu
     50                  55                  60
Phe Thr Thr Leu Gln Lys Ile Val Leu His Glu Val Glu Ala Asp Val
 65                  70                  75                  80
Ala Gln Val Arg Asn Ser Ala Thr Glu Ala Leu Leu Trp Leu Lys Arg
                 85                  90                  95
Gly Leu Lys Phe Leu Lys Gly Phe Leu Thr Glu Val Lys Asn Gly Glu
            100                 105                 110
Lys Asp Ile Gln Thr Ala Leu Asn Asn Ala Tyr Gly Lys Thr Leu Arg
        115                 120                 125
Gln His His Gly Trp Val Ile Arg Gly Val Phe Ala Leu Ala Leu Arg
    130                 135                 140
Ala Thr Pro Ser Tyr Glu Asp Phe Val Ala Ala Leu Thr Val Lys Glu
145                 150                 155                 160
Gly Asp His Arg Lys Glu Ala Phe Ser Ile Gly Met Gln Arg Asp Leu
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Ser Leu Tyr Leu Pro Ala Met Lys Lys Gln Met Ala Ile Leu Asp Ala
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<211> 3308
<212> DNA
<213> Homo sapiens

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<222> (56)..(2314)

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ccggccagag cacgtgtcca ggctggccac cggcttgagc aagtccctgc agctgacgga 780
gctcacgctg acccagtgct gcctgggcca gaagcagctg gccatcctcc tgagcttggt 840
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0606050.0202800
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<210> 18602
<211> 753
<212> PRT
<213> Homo sapiens

0050750 - 0050800

<400> 18602

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Cys Pro Leu Glu Pro Pro Ser Leu Thr Arg Leu Cys Ala Thr Leu Lys
        35                  40                  45
Asp Cys Pro Gly Pro Leu Glu Leu Gln Leu Ser Cys Glu Phe Leu Ser
    50                  55                  60
Asp Gln Ser Leu Glu Thr Leu Leu Asp Cys Leu Pro Gln Leu Pro Gln
65                  70                  75                  80
Leu Ser Leu Leu Gln Leu Ser Gln Thr Gly Leu Ser Pro Lys Ser Pro
                85                  90                  95
Phe Leu Leu Ala Asn Thr Leu Ser Leu Cys Pro Arg Val Lys Lys Val
            100                 105                 110
Asp Leu Arg Ser Leu His His Ala Thr Leu His Phe Arg Ser Asn Glu
        115                 120                 125
Glu Glu Glu Gly Val Cys Cys Gly Leu Ser Ala Asn Leu Leu Gly Asp
    130                 135                 140
Ser Gly Leu Arg Cys Leu Leu Glu Cys Leu Pro Gln Val Pro Ile Ser
145                 150                 155                 160
Gly Leu Leu Asp Leu Ser His Asn Ser Ile Ser Gln Glu Ser Ala Leu
                165                 170                 175
Tyr Leu Leu Glu Thr Leu Pro Ser Cys Pro Arg Val Arg Glu Ala Ser
            180                 185                 190
Val Asn Leu Gly Ser Glu Gln Ser Phe Arg Ile His Phe Ser Arg Glu
        195                 200                 205
Asp Gln Ala Gly Lys Thr Leu Arg Leu Ser Glu Cys Ser Phe Arg Pro
    210                 215                 220
Glu His Val Ser Arg Leu Ala Thr Gly Leu Ser Lys Ser Leu Gln Leu
225                 230                 235                 240
Thr Glu Leu Thr Leu Thr Gln Cys Cys Leu Gly Gln Lys Gln Leu Ala
                245                 250                 255
Ile Leu Leu Ser Leu Val Gly Arg Pro Ala Gly Leu Phe Ser Leu Arg
            260                 265                 270
Val Gln Glu Pro Trp Ala Asp Arg Ala Arg Val Leu Ser Leu Leu Glu
        275                 280                 285
Val Cys Ala Gln Ala Ser Gly Ser Val Ala Glu Ile Ser Ile Ser Glu
    290                 295                 300
Thr Gln Gln Gln Leu Cys Val Gln Leu Glu Phe Pro Arg Gln Glu Glu
305                 310                 315                 320
Asn Pro Glu Ala Val Ala Leu Arg Leu Ala His Cys Asp Leu Gly Ala
                325                 330                 335
His His Ser Leu Leu Val Gly Gln Leu Met Glu Thr Cys Ala Arg Leu
            340                 345                 350
Gln Gln Leu Ser Leu Ser Gln Val Asn Leu Cys Glu Asp Asp Asp Ala
        355                 360                 365
Ser Ser Leu Leu Leu Gln Ser Leu Leu Leu Ser Leu Ser Glu Leu Lys
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0050-0050-0050

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                405                 410                 415
Ser Asn Asn Gln Phe Asp Glu Glu Gly Thr Lys Ala Leu Met Arg Ala
            420                 425                 430
Leu Glu Gly Lys Trp Met Leu Lys Arg Leu Asp Leu Ser His Leu Leu
        435                 440                 445
Leu Asn Ser Ser Thr Leu Ala Leu Leu Thr His Arg Leu Ser Gln Met
    450                 455                 460
Thr Cys Leu Gln Ser Leu Arg Leu Asn Arg Asn Ser Ile Gly Asp Val
465                 470                 475                 480
Gly Cys Cys His Leu Ser Glu Ala Leu Arg Ala Ala Thr Ser Leu Glu
                485                 490                 495
Glu Leu Asp Leu Ser His Asn Gln Ile Gly Asp Ala Gly Val Gln His
            500                 505                 510
Leu Ala Thr Ile Leu Pro Gly Leu Pro Glu Leu Arg Lys Ile Asp Leu
        515                 520                 525
Ser Gly Asn Ser Ile Ser Ser Ala Gly Gly Val Gln Leu Ala Glu Ser
    530                 535                 540
Leu Val Leu Cys Arg Arg Leu Glu Glu Leu Met Leu Gly Cys Asn Ala
545                 550                 555                 560
Leu Gly Asp Pro Thr Ala Leu Gly Leu Ala Gln Glu Leu Pro Gln His
                565                 570                 575
Leu Arg Val Leu His Leu Pro Phe Ser His Leu Gly Pro Gly Gly Ala
            580                 585                 590
Leu Ser Leu Ala Gln Ala Leu Asp Gly Phe Pro His Leu Glu Glu Ile
        595                 600                 605
Ser Leu Ala Glu Asn Asn Leu Ala Gly Gly Val Leu Arg Phe Cys Met
    610                 615                 620
Glu Leu Pro Leu Leu Arg Gln Ile Asp Leu Val Ser Cys Lys Ile Asp
625                 630                 635                 640
Asn Gln Thr Ala Lys Leu Leu Thr Ser Ser Phe Thr Ser Cys Pro Ala
                645                 650                 655
Leu Glu Val Ile Leu Leu Ser Trp Asn Leu Leu Gly Asp Glu Ala Ala
            660                 665                 670
Ala Glu Leu Ala Gln Val Leu Pro Gln Met Gly Arg Leu Lys Arg Val
        675                 680                 685
Asp Pro Glu Lys Asn Gln Ile Thr Ala Leu Gly Ala Trp Leu Leu Ala
    690                 695                 700
Glu Gly Leu Ala Gln Gly Ser Ser Ile Gln Val Ile Arg Leu Trp Asn
705                 710                 715                 720
Asn Pro Ile Pro Cys Asp Met Ala Gln His Leu Lys Ser Gln Glu Pro
                725                 730                 735
Arg Leu Asp Phe Ala Phe Phe Asp Asn Gln Pro Gln Ala Pro Trp Gly
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Thr
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0507020 - 070800

09523460.070800

<210> 18603
<211> 1798
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (195)..(1709)

<400> 18603
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gcgctgttca taagatgatt gtggacaggc agtatatggg cgtgtctaag cggaagtgca 240
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<210> 18604
<211> 505
<212> PRT

0052352.0

<213> Homo sapiens

<400> 18604

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             20                  25                  30
Ser Ala Gly Lys Val Gln Phe Trp Asp Ser Ala Thr Gly Thr Leu Val
         35                  40                  45
Lys Ser His Leu Ile Ala Asn Ala Asp Val Gln Ser Ile Ala Val Ala
     50                  55                  60
Asp Gln Glu Asp Ser Phe Val Val Gly Thr Ala Glu Gly Thr Val Phe
 65                  70                  75                  80
His Phe Gln Leu Val Pro Val Thr Ser Asn Ser Ser Glu Lys Gln Trp
                 85                  90                  95
Val Arg Thr Lys Pro Phe Gln His His Thr His Asp Val Arg Thr Val
            100                 105                 110
Ala His Ser Pro Thr Ala Leu Ile Ser Gly Gly Thr Asp Thr His Leu
        115                 120                 125
Val Phe Arg Pro Leu Met Glu Lys Val Glu Val Lys Asn Tyr Asp Ala
    130                 135                 140
Ala Leu Arg Lys Ile Thr Phe Pro His Arg Cys Leu Ile Ser Cys Ser
145                 150                 155                 160
Lys Lys Arg Gln Leu Leu Leu Phe Gln Phe Ala His His Leu Glu Leu
                165                 170                 175
Trp Arg Leu Gly Ser Thr Val Ala Thr Gly Lys Asn Gly Asp Thr Leu
            180                 185                 190
Pro Leu Ser Lys Ser Ala Asp His Leu Leu His Leu Lys Thr Lys Gly
        195                 200                 205
Pro Glu Asn Ile Ile Cys Ser Cys Ile Ser Pro Cys Gly Ser Trp Ile
    210                 215                 220
Ala Tyr Ser Thr Val Ser Arg Phe Phe Leu Tyr Arg Leu Asn Tyr Glu
225                 230                 235                 240
His Asp Asn Ile Ser Leu Lys Arg Val Ser Lys Met Pro Ala Phe Leu
                245                 250                 255
Arg Ser Ala Leu Gln Ile Leu Phe Ser Glu Asp Ser Thr Lys Leu Phe
            260                 265                 270
Val Ala Ser Asn Gln Gly Ala Leu His Ile Val Gln Leu Ser Gly Gly
        275                 280                 285
Ser Phe Lys His Leu His Ala Phe Gln Pro Gln Ser Gly Thr Val Glu
    290                 295                 300
Ala Met Cys Leu Leu Ala Val Ser Pro Asp Gly Asn Trp Leu Ala Ala
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Ser Gly Thr Ser Ala Gly Val His Val Tyr Asn Val Lys Gln Leu Lys
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Leu His Cys Thr Val Pro Ala Tyr Asn Phe Pro Val Thr Ala Met Ala
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Ile Ala Pro Asn Thr Asn Asn Leu Val Ile Ala His Ser Asp Gln Gln
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Val Phe Glu Tyr Ser Ile Pro Asp Lys Gln Tyr Thr Asp Trp Ser Arg
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385                 390                 395                 400
Pro Ile Thr His Ile Ser Phe His Pro Lys Arg Pro Val His Ile Leu
                405                 410                 415
Leu His Asp Ala Tyr Met Phe Cys Ile Ile Asp Lys Ser Leu Pro Leu
            420                 425                 430
Pro Asn Asp Lys Thr Leu Leu Tyr Asn Pro Phe Pro Pro Thr Asn Glu
        435                 440                 445
Ser Asp Val Ile Arg Arg Arg Thr Ala His Ala Phe Lys Ile Ser Lys
    450                 455                 460
Ile Tyr Lys Pro Leu Leu Phe Met Asp Leu Leu Asp Glu Arg Thr Leu
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Val Ala Val Glu Arg Pro Leu Asp Asp Ile Ile Ala Gln Leu Pro Pro
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Pro Ile Lys Lys Lys Lys Phe Gly Thr
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<210> 18605
<211> 3635
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (185)..(1612)

<400> 18605

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0082020 6 5 4 3 2 1

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Arg	Tyr	Ser	Asp	Phe	His	Asp	Leu	His	Glu	Lys	Leu	Val	Ala	Glu	Arg
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Ser	Arg	Ser	Leu	Val	Glu	Lys	Arg	Glu	Lys	Asp	Leu	Glu	Val	Tyr	Leu
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Gln	Lys	Leu	Leu	Ala	Ala	Phe	Pro	Gly	Val	Thr	Pro	Arg	Val	Leu	Ala
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His	Phe	Leu	His	Phe	His	Phe	Tyr	Glu	Ile	Asn	Gly	Ile	Thr	Ala	Ala
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Leu	Gln	Gln	Gly	Lys	Pro	Thr	Cys	Ala	Ser	Gly	Asp	Ala	Lys	Thr	Asp
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Ser His Cys Asp Ala Lys His Ile Arg Gly Leu Val Ala Ser Lys Pro
225                 230                 235                 240
Thr Leu Ala Thr Leu Ser Val Arg Phe Ser Ala Thr Ser Met Lys Glu
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Val Leu Val Pro Glu Ala Ser Glu Phe Asp Glu Trp Glu Pro Glu Gly
            260                 265                 270
Thr Thr Leu Glu Gly Pro Val Thr Ala Val Ile Pro Thr Trp Gln Ala
        275                 280                 285
Leu Thr Thr Leu Asp Leu Ser His Asn Ser Ile Ser Glu Ile Asp Glu
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Ser Val Lys Leu Ile Pro Lys Ile Glu Phe Leu Asp Leu Ser His Asn
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Gly Leu Leu Val Val Asp Asn Leu Gln His Leu Tyr Asn Leu Val His
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Leu Asp Leu Ser Tyr Asn Lys Leu Ser Ser Leu Glu Gly Leu His Thr
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Lys Leu Gly Asn Ile Lys Thr Leu Asn Leu Ala Gly Asn Leu Leu Glu
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Ile Pro Asp Tyr Arg Thr Lys Val Leu Ala Gln Phe Gly Glu Arg Ala
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Ser Glu Val Cys Leu Asp Asp Thr Val Thr Thr Glu Lys Glu Leu Asp
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Lys Leu Ser Asn Pro Glu Lys Lys Gly Gly Glu Asp Ser Arg Leu Ser
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Ala Ala Pro Cys Ile Arg Pro Ser Ser Ser Pro Pro Thr Val Ala Pro
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Ala Ser Ala Ser Leu Pro Gln Pro Ile Leu Ser Asn Gln Gly Ile Met
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Phe Val Gln Glu Glu Ala Leu Ala Ser Ser Leu Ser Ser Thr Asp Ser
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Leu Ile Arg Gln Ala Ile Glu Arg Gln Leu Pro Ala Trp Ile Glu Ala
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Ala Asn Gln Arg Glu Glu Gly Gln Gly Glu Gln Gly Glu Glu Glu Asp
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Met Gly Pro Pro Asp Val Glu Glu Glu Glu Gly Gly Gly Gln Gly Glu
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Glu Glu Glu Glu Glu Glu Glu Asp Glu Glu Ala Glu Glu Glu Arg Leu
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Ala Leu Glu Trp Ala Leu Gly Ala Asp Glu Asp Phe Leu Leu Glu His
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Ile Arg Ile Leu Lys Val Leu Trp Cys Phe Leu Ile His Val Gln Gly
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Ile Leu Ser Ser Leu Arg Phe Val Phe Cys Phe Pro His Gly Asp Leu
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Glu Phe Leu Arg Gln Leu Leu Thr Phe Tyr Lys Val Ala Gly Gly Cys
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Gln Glu Arg Ser Gln Gly Cys Phe Pro Val Tyr Leu Val Tyr Ser Asp
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Thr Pro Gln His Leu Asn Val Ile Lys Ala Asp Phe Asn Pro Met Pro
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His Phe Leu Arg Val Tyr Asn Gln Leu Arg Ala Ser Leu Gln Asp Leu
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Lys Thr Val Val Ile Ala Lys Thr Pro Gly Thr Gly Gly Ser Pro Gln
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Glu Val Pro Ala Pro Ala Pro Ala Ala Ala Ser Ala Ser Gly Pro Ala
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Lys Thr Pro Ala Pro Ala Glu Ala Ser Thr Ser Ala Leu Val Pro Glu
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Glu Thr Pro Val Glu Ala Pro Ala Pro Pro Pro Ala Glu Ala Pro Ala
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Gln Tyr Pro Ser Glu His Leu Ile Gln Ala Thr Ser Glu Glu Asn Gln
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<212> DNA

0050050-0050800

<213> Homo sapiens

<220>
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<222> (169)..(690)

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<210> 18611
<211> 174
<212> PRT
<213> Homo sapiens

<400> 18611
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Asp Glu Lys Leu His Asp Ser Val Val Met Val Thr Gln Glu Ser Asp
35 40 45
Ser Ser Phe Leu Val Lys Val Gly Phe Leu Lys Ile Leu His Arg Tyr
50 55 60
Glu Ile Thr Phe Thr Leu Pro Pro Val His Arg Leu Ser Lys Asp Val
65 70 75 80
Arg Glu Ala Pro Val Pro Ser Leu His Leu Lys Leu Leu Ser Val Val
85 90 95

Pro Val Pro Glu Gly Tyr Ser Val Lys Cys Glu Tyr Ser Ala His Lys
100 105 110
Glu Gly Val Leu Lys Glu Glu Ile Leu Leu Ala Cys Glu Gly Gly Thr
115 120 125
Gly Thr Cys Val Arg Val Thr Val Gln Ala Arg Val Met Asp Arg His
130 135 140
His Gly Thr Pro Met Leu Leu Asp Gly Val Lys Cys Val Gly Ala Glu
145 150 155 160
Leu Glu Tyr Asp Ser Glu His Ser Asp Trp His Gly Phe Asp
165 170

<210> 18612
<211> 2138
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (152)..(1732)

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<210> 18613
<211> 527
<212> PRT
<213> Homo sapiens

<400> 18613
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35 40 45
Ser Lys Phe Asp Lys Leu Pro Val Lys Ile Val Gln Lys Asn Asp Pro
50 55 60
Phe Val Val Asp Cys Ser Asp Lys Leu Gly Arg Val Gln Glu Phe Asp
65 70 75 80
Ser Gly Leu Leu His Trp Arg Ile Gly Gly Gly Asp Thr Thr Glu His
85 90 95
Ile Gln Thr His Phe Glu Ser Lys Thr Glu Leu Leu Pro Ser Arg Pro
100 105 110
His Ala Pro Cys Pro Pro Ala Pro Arg Lys His Val Thr Thr Ala Glu
115 120 125
Gly Thr Pro Gly Thr Thr Asp Gln Glu Gly Pro Pro Pro Asp Gly Pro
130 135 140
Pro Glu Lys Arg Ile Thr Ala Thr Met Asp Asp Met Leu Ser Thr Arg
145 150 155 160
Ser Ser Thr Leu Thr Glu Asp Gly Ala Lys Ser Ser Glu Ala Ile Lys
165 170 175
Glu Ser Ser Lys Phe Pro Phe Gly Ile Ser Pro Ala Gln Ser His Arg
180 185 190
Asn Ile Lys Ile Leu Glu Asp Glu Pro His Ser Lys Asp Glu Thr Pro
195 200 205
Leu Cys Thr Leu Leu Asp Trp Gln Asp Ser Leu Ala Lys Arg Cys Val
210 215 220
Cys Val Ser Asn Thr Ile Arg Ser Leu Ser Phe Val Pro Gly Asn Asp
225 230 235 240

Phe Glu Met Ser Lys His Pro Gly Leu Leu Leu Ile Leu Gly Lys Leu
245 250 255
Ile Leu Leu His His Lys His Pro Glu Arg Lys Gln Ala Pro Leu Thr
260 265 270
Tyr Glu Lys Glu Glu Glu Gln Asp Gln Gly Val Ser Cys Asn Lys Val
275 280 285
Glu Trp Trp Trp Asp Cys Leu Glu Met Leu Arg Glu Asn Thr Leu Val
290 295 300
Thr Leu Ala Asn Ile Ser Gly Gln Leu Asp Leu Ser Pro Tyr Pro Glu
305 310 315 320
Ser Ile Cys Leu Pro Val Leu Asp Gly Leu Leu His Trp Ala Val Cys
325 330 335
Pro Ser Ala Glu Ala Gln Asp Pro Phe Ser Thr Leu Gly Pro Asn Ala
340 345 350
Val Leu Ser Pro Gln Arg Leu Val Leu Glu Thr Leu Ser Lys Leu Ser
355 360 365
Ile Gln Asp Asn Asn Val Asp Leu Ile Leu Ala Thr Pro Pro Phe Ser
370 375 380
Arg Leu Glu Lys Leu Tyr Ser Thr Met Val Arg Phe Leu Ser Asp Arg
385 390 395 400
Lys Asn Pro Val Cys Arg Glu Met Ala Val Val Leu Leu Ala Asn Leu
405 410 415
Ala Gln Gly Asp Ser Leu Ala Ala Arg Ala Ile Ala Val Gln Lys Gly
420 425 430
Ser Ile Gly Asn Leu Leu Gly Phe Leu Glu Asp Ser Leu Ala Ala Thr
435 440 445
Gln Phe Gln Gln Ser Gln Ala Ser Leu Leu His Met Gln Asn Pro Pro
450 455 460
Phe Glu Pro Thr Ser Val Asp Met Met Arg Arg Ala Ala Arg Ala Leu
465 470 475 480
Leu Ala Leu Ala Lys Val Asp Glu Asn His Ser Glu Phe Thr Leu Tyr
485 490 495
Glu Ser Arg Leu Leu Asp Ile Ser Val Ser Pro Leu Met Asn Ser Leu
500 505 510
Val Ser Gln Val Ile Cys Asp Val Leu Phe Leu Ile Gly Gln Ser
515 520 525

<210> 18614
<211> 1934
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (64)..(1029)

<400> 18614

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<210> 18615
<211> 322
<212> PRT
<213> Homo sapiens

<400> 18615
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Leu Gln Leu Ala Leu Ala Glu Arg Gln Ser Glu Leu Pro Thr Gln Ser
35 40 45
Lys Ala Ser Phe Pro Ser Ile Leu Ser Asp Pro Asp Pro Asp Ser Ser

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Val Ser Gly Pro Lys Pro Pro Ile Glu Ser His Phe Arg Pro Glu Phe
                 85                  90                  95
Ile Arg Pro Pro Pro Pro Leu His Ile Cys Glu Asp Glu Leu Ala Trp
            100                 105                 110
Leu Asn Pro Thr Glu Pro Asp His Ala Ile Gln Trp Asp Lys Ser Met
        115                 120                 125
Cys Val Lys Asn Ser Thr Gly Val Glu Ile Lys Arg Ile Met Ala Lys
    130                 135                 140
Ala Phe Lys Ser Pro Leu Ser Ser Pro Gln Gln Thr Gln Leu Leu Gly
145                 150                 155                 160
Glu Leu Glu Lys Asp Pro Lys Leu Val Tyr His Ile Gly Leu Thr Pro
                165                 170                 175
Ala Lys Leu Pro Asp Leu Val Glu Asn Asn Pro Leu Val Ala Ile Glu
            180                 185                 190
Met Leu Leu Lys Leu Met Gln Ser Ser Gln Ile Thr Glu Tyr Phe Ser
        195                 200                 205
Val Leu Val Asn Met Asp Met Ser Leu His Ser Met Glu Val Val Asn
    210                 215                 220
Arg Leu Thr Thr Ala Val Asp Leu Pro Pro Glu Phe Ile His Leu Tyr
225                 230                 235                 240
Ile Ser Asn Cys Ile Ser Thr Cys Glu Gln Ile Lys Asp Lys Tyr Met
                245                 250                 255
Gln Asn Arg Leu Val Arg Leu Val Cys Val Phe Leu Gln Ser Leu Ile
            260                 265                 270
Arg Asn Lys Ile Ile Asn Val Gln Asp Leu Phe Ile Glu Val Gln Ala
        275                 280                 285
Phe Cys Ile Glu Phe Ser Arg Ile Arg Glu Ala Ala Gly Leu Phe Arg
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Leu Leu Lys Thr Leu Asp Thr Gly Glu Thr Pro Ser Glu Thr Lys Met
305                 310                 315                 320
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<211> 2326
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (422)..(2128)

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aattctcatg ggggagaaac cctatgaatg tattgaatgt gggaaaactt tctccaagac 540
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atgtgagaaa actttctctc acaagacaca cctcagtgta catcagagag ttcacacagg 660
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<210> 18617
<211> 569
<212> PRT
<213> Homo sapiens

<400> 18617
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0962456.0780

0052952 0052952.0

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Cys Gly Lys Thr Phe Ser Lys Thr Ser His Leu Arg Ala His Gln Arg
            35                  40                  45
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Val Glu Cys Glu Lys Thr
        50                  55                  60
Phe Ser His Lys Thr His Leu Ser Val His Gln Arg Val His Thr Gly
65                  70                  75                  80
Glu Lys Pro Tyr Glu Cys Asn Asp Cys Gly Lys Ser Phe Thr Tyr Asn
                85                  90                  95
Ser Ala Leu Arg Ala His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
            100                 105                 110
Glu Cys Ser Asp Cys Glu Lys Thr Phe Ala His Asn Ser Ala Leu Arg
        115                 120                 125
Ala His His Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu
    130                 135                 140
Cys Gly Arg Ser Phe Ala His Ile Ser Val Leu Lys Ala His Gln Arg
145                 150                 155                 160
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Arg Ser
                165                 170                 175
Phe Thr Tyr Asn Ser Ala Leu Arg Ala His Gln Arg Ile His Thr Gly
            180                 185                 190
Arg Lys Pro Tyr Glu Cys Ser Asp Cys Glu Lys Thr Phe Ala His Asn
        195                 200                 205
Ser Ala Leu Lys Ile His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
    210                 215                 220
Glu Cys Asn Glu Cys Glu Lys Thr Phe Ala His Asn Ser Ala Leu Arg
225                 230                 235                 240
Ala His Gln Asn Ile His Thr Gly Glu Lys Leu Tyr Glu Cys Ser Glu
                245                 250                 255
Cys Gly Lys Thr Phe Phe Gln Lys Thr Arg Leu Ser Thr His Arg Arg
            260                 265                 270
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Ser Lys Cys Gly Lys Thr
        275                 280                 285
Phe Ser Gln Lys Ser Tyr Leu Ser Gly His Glu Arg Ile His Thr Gly
    290                 295                 300
Glu Lys Pro Tyr Glu Cys Asn Val Cys Gly Lys Thr Phe Val Tyr Lys
305                 310                 315                 320
Ala Ala Leu Ile Val His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
                325                 330                 335
Glu Cys Asn Gln Cys Gly Lys Thr Phe Ser Gln Arg Thr His Leu Cys
            340                 345                 350
Ala His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu
        355                 360                 365
Cys Gly Lys Thr Phe Ala Asp Asn Ser Ala Leu Arg Ala His His Arg
    370                 375                 380
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Asp Cys Gly Lys Thr
385                 390                 395                 400
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Phe Ser Lys Thr Ser His Leu Arg Ala His Leu Arg Thr Arg Ser Gly
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Glu Lys Pro Tyr Glu Cys Ser Glu Cys Gly Lys Thr Phe Ser Glu Lys
420 425 430
Ser Tyr Val Ser Ala His Gln Arg Val His Thr Gly Glu Lys Pro Tyr
435 440 445
Glu Cys Asn Val Cys Gly Lys Pro Phe Ala His Asn Ser Thr Leu Arg
450 455 460
Val His Gln Arg Ile His Thr Gly Glu Lys Ser Tyr Glu Cys Asn Asp
465 470 475 480
Cys Gly Lys Thr Phe Ser Gln Lys Ser His Leu Ser Ala His Gln Arg
485 490 495
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala
500 505 510
Phe Ala Gln Asn Ser Thr Leu Arg Val His Gln Arg Ile His Thr Gly
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<213> Homo sapiens

<400> 18625

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Cys Val Asp Thr Tyr Lys Tyr Leu Phe Ile Phe Ser Val Ala Asn Met
         35                  40                  45
Arg Asn Ser Lys Leu Lys Asp Ile Arg Asn Ala Trp Lys His Ser Arg
     50                  55                  60
Met Phe Phe Gly Lys Asn Lys Val Met Met Val Ala Leu Gly Arg Ser
 65                  70                  75                  80
Pro Ser Asp Glu Tyr Lys Asp Asn Leu His Gln Val Ser Lys Arg Leu
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Arg Gly Glu Val Gly Leu Leu Phe Thr Asn Arg Thr Lys Glu Glu Val
            100                 105                 110
Asn Glu Trp Phe Thr Lys Tyr Thr Glu Met Asp Tyr Ala Arg Ala Gly
        115                 120                 125
Asn Lys Ala Ala Phe Thr Val Ser Leu Asp Pro Gly Pro Leu Glu Gln
    130                 135                 140
Phe Pro His Ser Met Glu Pro Gln Leu Arg Gln Leu Gly Leu Pro Thr
145                 150                 155                 160
Ala Leu Lys Arg Gly Val Val Thr Leu Leu Ser Asp Tyr Glu Val Cys
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Lys Glu Gly Asp Val Leu Thr Pro Glu Gln Ala Arg Val Leu Lys Leu
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Phe Gly Tyr Glu Met Ala Glu Phe Lys Val Thr Ile Lys Tyr Met Trp
        195                 200                 205
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<213> Homo sapiens

<220>
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<400> 18626

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<212> PRT
<213> Homo sapiens

<400> 18627
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Val Pro Ala Ser Leu Ser Met His Met Ala Ile Ala Ala Glu Pro Arg
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<213> Homo sapiens

<220>
<221> CDS
<222> (447)..(1994)

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<211> 516
<212> PRT
<213> Homo sapiens

<400> 18629

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Ser	Ser	Ser	Leu	Val	Ser	Pro	Pro	Gln	Arg	Ile	Ser	Ser	Thr	Val	Lys
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Thr	His	Ile	Ser	His	Thr	Tyr	Glu	Cys	Asn	Phe	Val	Asp	Ser	Leu	Phe
65					70					75					80
Thr	Gln	Lys	Glu	Lys	Ala	Asn	Ile	Gly	Thr	Glu	His	Tyr	Lys	Cys	Asn
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Ile	Ile	His	Thr	Lys	Glu	Thr	Gln	Phe	Lys	Cys	Asp	Ile	Cys	Gly	Lys
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180 185 190
Ala Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn
195 200 205
Glu Cys Gly Lys Val Phe His Gln Ile Ser His Leu Ala Gln His Arg
210 215 220
Thr Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Lys Cys Gly Lys
225 230 235 240
Val Phe Ser Arg Asn Thr Tyr Leu Val Gln His Leu Ile Ile His Thr
245 250 255
Gly Glu Lys Pro Tyr Arg Cys Asn Val Cys Gly Lys Val Phe His His
260 265 270
Ile Ser His Leu Ala Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
275 280 285
Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Ser His Lys Ser Ser Leu
290 295 300
Val Asn His Trp Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn
305 310 315 320
Glu Cys Gly Lys Val Phe Ser His Lys Ser Ser Leu Val Asn His Trp
325 330 335
Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys
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Val Phe Ser Arg Asn Ser Tyr Leu Ala Gln His Leu Ile Ile His Ala
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Gly Glu Lys Pro Tyr Lys Cys Asp Glu Cys Asp Lys Ala Phe Ser Gln
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Asn Ser His Leu Val Gln His His Arg Ile His Thr Gly Glu Lys Pro
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Tyr Lys Cys Asp Glu Cys Gly Lys Val Phe Ser Gln Asn Ser Tyr Leu
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Ala Tyr His Trp Arg Ile His Thr Gly Glu Lys Ala Tyr Lys Cys Asn
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Glu Cys Gly Lys Val Phe Gly Leu Asn Ser Pro Leu Ala His His Arg
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Lys Ile His Thr Gly Glu Lys Pro Phe Lys Cys Asn Glu Cys Gly Lys
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Gly Glu Lys His Phe Lys Cys Asn Glu Cys Gly Lys Leu Phe Arg Asp
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<212> DNA
<213> Homo sapiens

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<222> (908)..(1225)

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<212> PRT
<213> Homo sapiens

<400> 18631
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35 40 45
Ser Ser Arg Ala Ser Pro Glu Ala Ser Asn Gln Lys Gly Cys Val Ser
50 55 60
Cys Ser Asn Ser Ala Pro Glu Thr Ala Gln Ser Gln Lys Ala Pro Arg
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His Arg Gly Leu Trp Pro Lys Trp Gly Ser
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<211> 2165
<212> DNA
<213> Homo sapiens

<220>
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<222> (164)..(1252)

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<400> 18633

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Lys Gln Cys Gly Lys Ala Leu Ser Ser Leu Thr Ser Phe Gln Thr His
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Arg Ser Gly Ser Phe Arg Tyr His Glu Arg Thr His Thr Gly Glu Lys
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Pro Tyr Glu Cys Lys Gln Cys Gly Lys Ala Phe Arg Ser Ala Pro Asn
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<400> 18634

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Thr Cys Thr His Ile Pro Trp Ala Pro Cys Leu Thr His Ser Glu Pro
         35                  40                  45
Thr Gln Asp Pro Val Gly Ala His Ser Thr Asn Leu Glu Pro Gly Leu
     50                  55                  60
Cys Leu His Phe Ser Leu Pro Trp Glu Leu His Leu Pro Pro Gly Pro
 65                  70                  75                  80
Pro Glu Asp Thr Gln Gly Arg Val Gln Tyr Phe Ser Leu Pro Val Ser
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<213> Homo sapiens

<400> 18637

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Lys Asn Arg Asn Leu His Ser Pro Met Tyr Cys Phe Ile Cys Cys Leu
 65                  70                  75                  80
Ala Leu Ser Asp Leu Leu Val Ser Gly Ser Asn Val Leu Glu Thr Ala
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Val Ile Leu Leu Leu Glu Ala Gly Ala Leu Val Ala Arg Ala Ala Val
            100                 105                 110
Leu Gln Gln Leu Asp Asn Val Ile Asp Val Ile Thr Cys Ser Ser Met
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Leu Ser Ser Leu Cys Phe Leu Gly Ala Ile Ala Val Asp Arg Tyr Ile
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Ser Ile Phe Tyr Ala Leu Arg Tyr His Ser Ile Val Thr Leu Pro Arg
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Ala Arg Arg Ala Val Ala Ala Ile Trp Val Ala Ser Val Val Phe Ser
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Thr Leu Phe Ile Ala Tyr Tyr Asp His Val Ala Val Leu Leu Cys Leu
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Val Val Phe Phe Leu Ala Met Leu Val Leu Met Ala Val Leu Tyr Val
        195                 200                 205
His Met Leu Ala Arg Ala Cys Gln His Ala Gln Gly Ile Ala Arg Leu
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His Lys Arg Gln Arg Pro Val His Gln Gly Phe Gly Leu Lys Gly Ala
225                 230                 235                 240
Val Thr Leu Thr Ile Leu Leu Gly Ile Phe Phe Leu Cys Trp Gly Pro
                245                 250                 255
Phe Phe Leu His Leu Thr Leu Ile Val Leu Cys Pro Glu His Pro Thr
            260                 265                 270
Cys Gly Cys Ile Phe Lys Asn Phe Asn Leu Phe Leu Ala Leu Ile Ile
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<400> 18638

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<210> 18651
<211> 101
<212> PRT
<213> Homo sapiens

<400> 18651
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Ala Thr Val Ser Thr Pro Gly Ser Trp Val Leu Ser Ser Pro Ser Gln
20 25 30
Asp Ile Phe Arg Pro Gly Leu Ser Glu Leu Leu Leu Leu Leu Ile Ile
35 40 45
Glu Thr Gly Ser Gln Ser Ile Ala Lys Thr Gly Val Gln Trp Cys Asp
50 55 60
Pro Gly Leu Leu Ser Leu Pro Gly Ser Gly Asp Pro Pro Ser Ser Ala
65 70 75 80
Ser Cys Val Ala Gly Thr Thr Gly Arg His His His Ala Trp Leu Asn
85 90 95
Phe Leu Tyr Phe Leu
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<210> 18652
<211> 1792

0050250.0050

<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (360)..(677)

<400> 18652
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<211> 106
<212> PRT
<213> Homo sapiens

<400> 18653
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Asp Asn Arg Asn Val Phe Ser His Ser Ser Gly Gly Trp Met Leu Glu
        35                  40                  45
Thr Lys Val Ser Val Gly Trp Phe Leu Leu Arg Pro Leu Ser Met Ala
    50                  55                  60
Cys Arg Cys Cys Phe Pro Ser Val Ser Ala His Gly Gly Pro Ser Met
65                  70                  75                  80
Cys Val Trp Val Leu Ile Ser Ser Ser Tyr Lys Asp Thr Asn His Val
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Gly Leu Gly Pro Thr Leu Met Thr Pro Leu
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<210> 18654
<211> 3076
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (23)..(2596)

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<210> 18655
<211> 858
<212> PRT
<213> Homo sapiens

<400> 18655
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35 40 45
Asn Arg Val Ser Cys His Asp Ser Asp Asp Asp Ile Met Arg Asn Asp
50 55 60
Arg Glu Tyr Asp Ser Gly Asp Thr Asp Glu Ile Ile Ala Met Lys Lys
65 70 75 80
Asn Val Ala Lys Val Lys Asn Ser Thr Glu Phe Ser Gln Met Glu Lys
85 90 95

Ser Thr Lys Lys Thr Ser Phe Lys Asn Arg Glu Asn Cys Glu Leu Ser
100 105 110
Asp His Cys Ile Lys Leu Gln Lys Arg Lys Ser Asn Val Glu Ser Ala
115 120 125
Leu Ser His Gly Leu Lys Ser Leu Asn Arg Lys Ser Pro Ser His Ser
130 135 140
Gly Ser Ser Glu Asp Ala Asp Ser Ala Ser Glu Leu Ala Asp Ser Glu
145 150 155 160
Gly Gly Glu Glu Tyr Asn Ala Met Met Glu Asn Cys Leu Arg Val Asn
165 170 175
Leu Thr Leu Ala Asp Leu Glu Gln Leu Ala Gly Ser Asp Leu Lys Val
180 185 190
Pro Asn Glu Asp Thr Lys Ser Asp Gly Pro Glu Thr Thr Thr Gln Cys
195 200 205
Lys Phe Asp Arg Gly Ser Lys Ser Pro Lys Thr Pro Thr Gly Leu Arg
210 215 220
Arg Gly Arg Gln Cys Ile Arg Pro Ala Glu Ile Val Ala Ser Leu Leu
225 230 235 240
Glu Gly Glu Glu Asn Thr Cys Gly Lys Gln Lys Pro Lys Glu Asn Asn
245 250 255
Leu Lys Pro Lys Phe Gln Ala Phe Lys Gly Val Gly Cys Leu Tyr Glu
260 265 270
Lys Glu Ser Met Lys Lys Ser Leu Lys Asp Ser Val Ala Ser Asn Asn
275 280 285
Lys Asp Gln Asn Ser Met Lys His Glu Asp Pro Ser Ile Ile Ser Met
290 295 300
Glu Asp Gly Ser Pro Tyr Val Asn Gly Ser Leu Gly Glu Val Thr Pro
305 310 315 320
Cys Gln His Ala Lys Lys Ala Asn Gly Pro Asn Tyr Ile Gln Pro Gln
325 330 335
Lys Arg Gln Thr Thr Phe Glu Ser Gln Asp Arg Lys Ala Val Ser Pro
340 345 350
Ser Ser Ser Glu Lys Arg Ser Lys Asn Pro Ile Ser Arg Pro Leu Glu
355 360 365
Gly Lys Lys Ser Leu Ser Leu Ser Ala Lys Thr His Asn Ile Gly Phe
370 375 380
Asp Lys Asp Ser Cys His Ser Thr Thr Lys Thr Glu Ala Ser Gln Glu
385 390 395 400
Glu Arg Ser Asp Ser Ser Gly Leu Thr Ser Leu Lys Lys Ser Pro Lys
405 410 415
Val Ser Ser Lys Asp Thr Arg Gly Ile Lys Thr Asp Phe Ser Leu Ser
420 425 430
Ile Ser Asn Ser Ser Asp Val Gly Ala Lys Asp Lys His Ala Glu Asp
435 440 445
Asn Glu Lys Arg Leu Ala Ala Leu Glu Ala Arg Gln Lys Ala Lys Glu
450 455 460
Val Gln Lys Lys Leu Val His Asn Ala Leu Ala Asn Leu Asp Gly His
465 470 475 480

0056548 · 0756800

Pro Glu Asp Lys Pro Thr His Ile Ile Phe Gly Ser Asp Ser Glu Cys
485 490 495
Glu Thr Glu Glu Thr Ser Thr Gln Glu Gln Ser His Pro Gly Glu Glu
500 505 510
Trp Val Lys Glu Ser Met Gly Lys Thr Ser Gly Lys Leu Phe Asp Ser
515 520 525
Ser Asp Asp Asp Glu Ser Asp Ser Glu Asp Asp Ser Asn Arg Phe Lys
530 535 540
Ile Lys Pro Gln Phe Glu Gly Arg Ala Gly Gln Lys Leu Met Asp Leu
545 550 555 560
Gln Ser His Phe Gly Thr Asp Asp Arg Phe Arg Met Asp Ser Arg Phe
565 570 575
Leu Glu Thr Asp Ser Glu Glu Glu Gln Glu Glu Val Asn Glu Lys Lys
580 585 590
Thr Ala Glu Glu Glu Glu Leu Ala Glu Glu Lys Lys Lys Ala Leu Asn
595 600 605
Val Val Gln Ser Val Leu Gln Ile Asn Leu Ser Asn Ser Thr Asn Arg
610 615 620
Gly Ser Val Ala Ala Lys Lys Phe Lys Asp Ile Ile His Tyr Asp Pro
625 630 635 640
Thr Lys Gln Asp His Ala Thr Tyr Glu Arg Lys Arg Asp Asp Lys Pro
645 650 655
Lys Glu Ser Lys Ala Lys Arg Lys Lys Lys Arg Glu Glu Ala Glu Lys
660 665 670
Leu Pro Glu Val Ser Lys Glu Met Tyr Tyr Asn Ile Ala Met Asp Leu
675 680 685
Lys Glu Ile Phe Gln Thr Thr Lys Tyr Thr Ser Glu Lys Glu Glu Gly
690 695 700
Thr Pro Trp Asn Glu Asp Cys Gly Lys Glu Lys Pro Glu Glu Ile Gln
705 710 715 720
Asp Pro Ala Ala Leu Thr Ser Asp Ala Glu Gln Pro Ser Gly Phe Thr
725 730 735
Phe Ser Phe Phe Asp Ser Asp Thr Lys Asp Ile Lys Glu Glu Thr Tyr
740 745 750
Arg Val Glu Thr Val Lys Pro Gly Lys Ile Val Trp Gln Glu Asp Pro
755 760 765
Arg Leu Gln Asp Ser Ser Ser Glu Glu Glu Asp Val Thr Glu Glu Thr
770 775 780
Asp His Arg Asn Ser Ser Pro Gly Glu Ala Ser Leu Leu Glu Lys Glu
785 790 795 800
Thr Thr Arg Phe Phe Phe Phe Ser Lys Asn Asp Glu Arg Leu Gln Gly
805 810 815
Ser Asp Leu Phe Trp Arg Gly Val Gly Ser Asn Met Ser Arg Asn Ser
820 825 830
Trp Glu Ala Arg Thr Thr Asn Leu Arg Met Asp Cys Arg Lys Lys His
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850 855

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<210> 18656
<211> 2175
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (82)..(1407)

<400> 18656
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<211> 442
<212> PRT
<213> Homo sapiens

<400> 18657

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         35                  40                  45
Val Gln Pro Asn Pro Glu Ala Arg Leu Arg Arg Ala Lys Pro Arg Ala
     50                  55                  60
Ser Asp Glu Gln Thr Pro Leu Val Asn Cys His Thr Pro His Ser Asn
 65                  70                  75                  80
Val Ile Leu His Gly Ile Asp Gly Pro Ala Ala Val Leu Lys Pro Asp
                 85                  90                  95
Glu Val His Ala Pro Ser Val Ser Ser Ser Val Val Glu Glu Asp Ala
            100                 105                 110
Glu Asn Thr Val Asp Thr Ala Ser Lys Pro Gly Leu Gln Glu Arg Leu
        115                 120                 125
Gln Lys His Asp Ile Ser Glu Ser Val Asn Phe Asp Glu Glu Thr Asp
    130                 135                 140
Gly Ile Ser Gln Ser Ala Cys Leu Glu Arg Pro Asn Ser Ala Ser Ser
145                 150                 155                 160
Gln Asn Ser Thr Asp Thr Gly Thr Ser Gly Ser Ala Thr Ala Ala Gln
                165                 170                 175
Pro Ala Asp Asn Leu Leu Gly Asp Ile Asp Asp Leu Glu Asp Phe Val
            180                 185                 190
Tyr Ser Pro Ala Pro Gln Gly Val Thr Val Arg Cys Arg Ile Ile Arg
        195                 200                 205
Asp Lys Arg Gly Met Asp Arg Gly Leu Phe Pro Thr Tyr Tyr Met Tyr
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Leu Glu Lys Glu Glu Asn Gln Lys Ile Phe Leu Leu Ala Ala Arg Lys
225                 230                 235                 240
Arg Lys Lys Ser Lys Thr Ala Asn Tyr Leu Ile Ser Ile Asp Pro Val
                245                 250                 255
Asp Leu Ser Arg Glu Gly Glu Ser Tyr Val Gly Lys Leu Arg Ser Asn
            260                 265                 270
Leu Met Gly Thr Lys Phe Thr Val Tyr Asp Arg Gly Ile Cys Pro Met
        275                 280                 285
Lys Gly Arg Gly Leu Val Gly Ala Ala His Thr Arg Gln Glu Leu Ala
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Ala Ile Ser Tyr Glu Thr Asn Val Leu Gly Phe Lys Gly Pro Arg Lys
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            340                 345                 350
Arg Thr Met Glu Asn Leu Val Glu Leu His Asn Lys Ala Pro Val Trp
        355                 360                 365
Asn Ser Asp Thr Gln Ser Tyr Val Leu Asn Phe Arg Gly Arg Val Thr
    370                 375                 380
Gln Ala Ser Val Lys Asn Phe Gln Ile Val His Lys Asn Asp Pro Asp
385                 390                 395                 400
Tyr Ile Val Met Gln Phe Gly Arg Val Ala Asp Asp Val Phe Thr Leu
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Ser Ser Phe Asp Ser Lys Leu Ala Cys Glu
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<210> 18658
<211> 3449
<212> DNA
<213> Homo sapiens

<400> 18658

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Pro Gly Pro Pro Leu Ser Tyr Gln Trp Leu Leu Leu Ala Lys Ile Asp
50 55 60
Leu Lys Ser Ala Ser Ser His Pro Ala Leu Ala Ser Glu Trp Pro Leu

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His Thr Gln Leu Ile Pro Val Cys Gly Leu Ser Ser Pro Lys Leu Leu
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Leu Pro Phe Gly Ser Leu Tyr Arg Leu Ser Ser Ser Leu Thr Val Ala
    130                 135                 140
Ser Phe Ser Pro Thr His Ala Ser Cys Asn Leu Pro Lys Cys Gln Leu
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Gln Gln Ala His Pro Leu Pro Val Gly Gly Leu Tyr Arg Pro Gly Leu
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Tyr Leu Thr Val Gly Ser Pro Gly Pro Pro Leu Pro His Arg Gly Leu
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Ala Ser Lys Ser Asp Ser Pro Ser Val Gly Glu Thr Glu Arg Asn Ser
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Ala Glu Pro Ala Ala Val Ile Val Glu Lys Pro Leu Gly Val Pro Pro
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Ala Gln Gly Leu Ser Ile Pro Val Ile Gly Ala Lys Val Asp Ser Thr
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Ala Leu Val Gly Asp Val Val Cys Glu Thr Pro Phe Arg Leu His Gly
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<213> Homo sapiens

<400> 18674
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35 40 45
Val Leu Cys Ser Thr Asn Val Ser His Tyr Glu Leu Gln Val Glu Ile
50 55 60
Gly Arg Gly Phe Asp Asn Leu Thr Ser Val His Leu Ala Arg His Thr
65 70 75 80
Pro Thr Gly Thr Leu Val Thr Ile Lys Ile Thr Asn Leu Glu Asn Cys
85 90 95
Asn Glu Glu Arg Leu Lys Ala Leu Gln Lys Ala Val Ile Leu Ser His

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Gly Ser Trp Leu Trp Val Ile Ser Pro Phe Met Ala Tyr Gly Ser Ala
    130                 135                 140
Ser Gln Leu Leu Arg Thr Tyr Phe Pro Glu Gly Met Ser Glu Thr Leu
145                 150                 155                 160
Ile Arg Asn Ile Leu Phe Gly Ala Val Arg Gly Leu Asn Tyr Leu His
                165                 170                 175
Gln Asn Gly Cys Ile His Arg Ser Ile Lys Ala Ser His Ile Leu Ile
            180                 185                 190
Ser Gly Asp Gly Leu Val Thr Leu Ser Gly Leu Ser His Leu His Ser
        195                 200                 205
Leu Val Lys His Gly Gln Arg His Arg Ala Val Tyr Asp Phe Pro Gln
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Phe Ser Thr Ser Val Gln Pro Trp Leu Ser Pro Glu Leu Leu Arg Gln
225                 230                 235                 240
Asp Leu His Gly Tyr Asn Val Lys Ser Asp Ile Tyr Ser Val Gly Ile
                245                 250                 255
Thr Ala Cys Glu Leu Ala Ser Gly Gln Val Pro Phe Gln Asp Met His
            260                 265                 270
Arg Thr Gln Met Leu Leu Gln Lys Leu Lys Gly Pro Pro Tyr Ser Pro
        275                 280                 285
Leu Asp Ile Ser Ile Phe Pro Gln Ser Glu Ser Arg Met Lys Asn Ser
    290                 295                 300
Gln Ser Gly Val Asp Ser Gly Ile Gly Glu Ser Val Leu Val Ser Ser
305                 310                 315                 320
Gly Thr His Thr Val Asn Ser Asp Arg Leu His Thr Pro Ser Ser Lys
                325                 330                 335
Thr Phe Ser Pro Ala Phe Phe Ser Leu Val Gln Leu Cys Leu Gln Gln
            340                 345                 350
Asp Pro Glu Lys Arg Pro Ser Ala Ser Ser Leu Leu Ser His Val Phe
        355                 360                 365
Phe Lys Gln Met Lys Glu Glu Ser Gln Asp Ser Ile Leu Ser Leu Leu
    370                 375                 380
Pro Pro Ala Tyr Asn Lys Pro Ser Ile Ser Leu Pro Pro Val Leu Pro
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Trp Thr Glu Pro Glu Cys Asp Phe Pro Asp Glu Lys Asp Ser Tyr Trp
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<211> 2834
<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (129)..(2180)

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<211> 684
<212> PRT
<213> Homo sapiens

<400> 18676
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35 40 45
Ser Val Glu Pro Val Glu Glu Tyr Asp Tyr Glu Asp Leu Lys Glu Ser
50 55 60
Ser Asn Ser Val Ser Asn His Gln Leu Ser Gly Phe Asp Gln Ala Arg
65 70 75 80
Leu Tyr Ser Cys Leu Asp His Met Arg Glu Val Leu Gly Asp Ala Val
85 90 95
Pro Asp Glu Ile Leu Ile Glu Ala Val Leu Lys Asn Lys Phe Asp Val
100 105 110
Gln Lys Ala Leu Ser Gly Val Leu Glu Gln Asp Arg Val Gln Ser Leu
115 120 125
Lys Asp Lys Asn Glu Ala Thr Val Ser Thr Gly Lys Ile Ala Lys Gly
130 135 140
Lys Pro Val Asp Ser Gln Thr Ser Arg Ser Glu Ser Glu Ile Val Pro
145 150 155 160
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165 170 175
Glu Val Pro Gly Val Ser Ser Glu Glu Asn Gly His Ser Phe His Thr
180 185 190
Pro Gln Lys Gly Pro Pro Ile Glu Asp Ala Ile Ala Ser Ser Asp Val
195 200 205
Leu Glu Thr Ala Ser Lys Ser Ala Asn Pro Pro His Thr Ile Gln Ala
210 215 220
Ser Glu Glu Gln Ser Ser Thr Pro Ala Pro Val Lys Lys Ser Gly Lys
225 230 235 240
Leu Arg Gln Gln Ile Asp Val Lys Ala Glu Leu Glu Lys Arg Gln Gly
245 250 255
Gly Lys Gln Leu Leu Asn Leu Val Val Ile Gly His Val Asp Ala Gly
260 265 270
Lys Ser Thr Leu Met Gly His Met Leu Tyr Leu Leu Gly Asn Ile Asn

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Glu Arg Gly Val Thr Thr Asp Val Gly Met Thr Lys Phe Glu Thr Thr
                325                 330                 335
Thr Lys Val Ile Thr Leu Met Asp Ala Pro Gly His Lys Asp Phe Ile
            340                 345                 350
Pro Asn Met Ile Thr Gly Ala Ala Gln Ala Asp Val Ala Val Leu Val
        355                 360                 365
Val Asp Ala Ser Arg Gly Glu Phe Glu Ala Gly Phe Glu Thr Gly Gly
    370                 375                 380
Gln Thr Arg Glu His Gly Leu Leu Val Arg Ser Leu Gly Val Thr Gln
385                 390                 395                 400
Leu Ala Val Ala Val Asn Lys Met Asp Gln Val Asn Trp Gln Gln Glu
                405                 410                 415
Arg Phe Gln Glu Ile Thr Gly Lys Leu Gly His Phe Leu Lys Gln Ala
            420                 425                 430
Gly Phe Lys Glu Ser Asp Val Gly Phe Ile Pro Thr Ser Gly Leu Ser
        435                 440                 445
Gly Glu Asn Leu Ile Thr Arg Ser Gln Ser Ser Glu Leu Thr Lys Trp
    450                 455                 460
Tyr Lys Gly Leu Cys Leu Leu Glu Gln Ile Asp Ser Phe Lys Pro Pro
465                 470                 475                 480
Gln Arg Ser Ile Asp Lys Pro Phe Arg Leu Cys Val Ser Asp Val Phe
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Lys Asp Gln Gly Ser Gly Phe Cys Ile Thr Gly Lys Ile Glu Ala Gly
            500                 505                 510
Tyr Ile Gln Thr Gly Asp Arg Leu Leu Ala Met Pro Pro Asn Glu Thr
        515                 520                 525
Cys Thr Val Lys Gly Ile Thr Leu His Asp Glu Pro Val Asp Trp Ala
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Ala Ala Gly Asp His Val Ser Leu Thr Leu Val Gly Met Asp Ile Ile
545                 550                 555                 560
Lys Ile Asn Val Gly Cys Ile Phe Cys Gly Pro Lys Val Pro Ile Lys
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Ala Cys Thr Arg Phe Arg Ala Arg Ile Leu Ile Phe Asn Ile Glu Ile
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Pro Ile Thr Lys Gly Phe Pro Val Leu Leu His Tyr Gln Thr Val Ser
        595                 600                 605
Glu Pro Ala Val Ile Lys Arg Leu Ile Ser Val Leu Asn Lys Ser Thr
    610                 615                 620
Gly Glu Val Thr Lys Lys Lys Pro Lys Phe Leu Thr Lys Gly Gln Asn
625                 630                 635                 640
Ala Leu Val Glu Leu Gln Thr Gln Arg Pro Ile Ala Leu Glu Leu Tyr
                645                 650                 655
Lys Asp Phe Lys Glu Leu Gly Arg Phe Met Leu Arg Tyr Gly Gly Ser
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675 680

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<211> 3626
<212> DNA
<213> Homo sapiens

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<222> (157)..(2046)

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<400> 18678
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35 40 45
Gly Pro Pro Phe Val Asn Glu Ala Asn Ser Lys Trp Leu Asp Ala His
50 55 60
Tyr Asp Pro Met Ala Asn Ile His Thr Phe Ser Ala Cys Leu Ala Leu
65 70 75 80
Ala Asp Leu His Gly Asp Gly Glu Tyr Lys Leu Val Val Gly Asp Leu
85 90 95

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Val Met Thr Glu Ser Pro Leu Pro Ala Leu Pro Ala Ala Ala Ala Thr
        115                 120                 125
Phe Leu Met Glu Gln His Glu Pro Arg Thr Pro Ala Leu Ala Leu Ala
    130                 135                 140
Ser Gly Pro Cys Val Tyr Val Tyr Lys Asn Leu Arg Pro Tyr Phe Lys
145                 150                 155                 160
Phe Ser Leu Pro Gln Leu Pro Pro Asn Pro Leu Glu Gln Asp Leu Trp
                165                 170                 175
Asn Gln Ala Lys Glu Asp Arg Ile Asp Pro Leu Thr Leu Lys Glu Met
            180                 185                 190
Leu Glu Ser Ile Arg Glu Thr Ala Glu Glu Pro Leu Ser Ile Gln Ser
        195                 200                 205
Leu Arg Phe Leu Gln Leu Glu Leu Ser Glu Met Glu Ala Phe Val Asn
    210                 215                 220
Gln His Lys Ser Asn Ser Ile Lys Arg Gln Thr Val Ile Thr Thr Met
225                 230                 235                 240
Thr Thr Leu Lys Lys Asn Leu Ala Asp Glu Asp Ala Val Ser Cys Leu
                245                 250                 255
Val Leu Gly Thr Glu Asn Lys Glu Leu Leu Val Leu Asp Pro Glu Ala
            260                 265                 270
Phe Thr Ile Leu Ala Lys Met Ser Leu Pro Ser Val Pro Val Phe Leu
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Glu Val Ser Gly Gln Phe Asp Val Glu Phe Arg Leu Ala Ala Ala Cys
    290                 295                 300
Arg Asn Gly Asn Ile Tyr Ile Leu Arg Arg Asp Ser Lys His Pro Lys
305                 310                 315                 320
Tyr Cys Ile Glu Leu Ser Ala Gln Pro Val Gly Leu Ile Arg Val His
                325                 330                 335
Lys Val Leu Val Val Gly Ser Thr Gln Asp Ser Leu His Gly Phe Thr
            340                 345                 350
His Lys Gly Lys Lys Leu Trp Thr Val Gln Met Pro Ala Ala Ile Leu
        355                 360                 365
Thr Met Asn Leu Leu Glu Gln His Ser Arg Gly Leu Gln Ala Val Met
    370                 375                 380
Ala Gly Leu Ala Asn Gly Glu Val Arg Ile Tyr Arg Asp Lys Ala Leu
385                 390                 395                 400
Leu Asn Val Ile His Thr Pro Asp Ala Val Thr Ser Leu Cys Phe Gly
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Arg Tyr Gly Arg Glu Asp Asn Thr Leu Ile Met Thr Thr Arg Gly Gly
            420                 425                 430
Gly Leu Ile Ile Lys Ile Leu Lys Arg Thr Ala Val Phe Val Glu Gly
        435                 440                 445
Gly Ser Glu Val Gly Pro Pro Pro Ala Gln Ala Met Lys Leu Asn Val
    450                 455                 460
Pro Arg Lys Thr Arg Leu Tyr Val Asp Gln Thr Leu Arg Glu Arg Glu
465                 470                 475                 480
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500 505 510
Ser Pro Leu Ser Thr Thr Ala Arg Glu Pro Leu Lys Leu His Ala Val
515 520 525
Val Gln Gly Leu Gly Pro Thr Phe Lys Leu Thr Leu His Leu Gln Asn
530 535 540
Thr Ser Thr Thr Arg Pro Val Leu Gly Leu Leu Val Cys Phe Leu Tyr
545 550 555 560
Asn Glu Ala Leu Tyr Ser Leu Pro Arg Ala Phe Phe Lys Val Pro Leu
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Leu Val Pro Gly Leu Asn Tyr Pro Leu Glu Thr Phe Val Glu Ser Leu
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625 630

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<212> DNA
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Ser Leu Val Trp Lys Arg Arg Ile Leu Phe Phe Val Val Thr Leu Val
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Ser Val Phe Leu Val Trp Lys Phe Thr Tyr Ala His Lys Tyr Leu Leu
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Ala Asp Asn Arg His Tyr Thr Phe Tyr Val Trp Lys Arg Val Phe Gln
        195                 200                 205
Arg Tyr Glu Thr Val Lys Tyr Leu Leu Val Pro Ala Tyr Ile Phe Ala
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Pro Arg Arg Ser Leu Gly Leu Ala Leu Thr His Ser Phe Gly Pro Ser
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225                 230                 235                 240
Pro Ser Gly Thr Gly Lys Thr Tyr Leu Thr Asn Arg Leu Ala Glu Tyr
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Phe Asn Met His Gln Gln Ser Cys Lys Asp Leu Gln Leu Tyr Leu Ser
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<400> 18697

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Lys Gln Ile Ser Lys Tyr Cys Pro Leu Asp Leu Tyr Ser Gly Asn Lys
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Gln Arg Met His Phe Ala Leu Lys Ser Leu Leu Gln Glu Ala Gln Asn
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Phe Cys Ile Gly Arg Asp Ile Arg Lys Lys Asp Ile Asn Asn Ile Val
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Lys Thr Leu His Glu Trp Cys Asp Gly Cys Glu Ala Val Leu Leu Gly
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Arg Thr Gln Gln Gln Val Glu Ala Glu Val Thr Asn Ile Lys Lys Thr
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65                  70                  75                  80
Tyr Lys Ser Phe Ser Arg Gln Leu Asp Gln Leu Ser Arg Leu Gly Ser
                85                  90                  95
Ser Ser Leu Thr Asn Ile Pro Glu Glu Val Arg Glu His Val Lys Leu
            100                 105                 110
Leu Leu Asn Val Thr Pro Thr Val Arg Pro Asp Ala Asp Gln Met Thr
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Lys Ile Pro Phe Phe Asp Asp Val Gly Ala Val Thr Leu Gln Tyr Phe
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Asp Thr Leu Phe Gln Arg Asp Asn Leu Gln Lys Ser Gln Phe Phe Lys
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Gly Leu Leu Lys Val Leu Pro Lys Leu Pro Lys Arg Val Ile Val Gln
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Arg Ile Leu Pro Cys Leu Thr Ser Glu Phe Val Asn Pro Asp Met Val
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Pro Phe Val Leu Pro Asn Val Leu Leu Ile Ala Glu Glu Cys Thr Lys
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465                 470                 475                 480
Arg Ala Ser Leu Thr Leu Glu Glu Lys Gln Lys Leu Ala Lys Glu Gln
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Glu Gln Ala Gln Lys Leu Lys Ser Gln Gln Pro Leu Lys Pro Gln Val
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His Thr Pro Val Ala Thr Val Lys Gln Thr Lys Asp Leu Thr Asp Thr
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Lys Ser Ser Ala Ser Ser Thr Phe Thr Ser Val Pro Ser Met Gly Ile
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Gly Met Met Phe Ser Thr Pro Thr Asp Asn Thr Lys Arg Asn Leu Thr
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Pro Val Asn Thr Asn Gln Asn Phe Tyr Ser Ser Pro Ser Thr Val Gly
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Ala Leu Ser Val Pro Pro Ala Gly Ala Lys Gln Thr Gln Gln Arg Pro
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Gln Phe Val Pro Pro Gln Gly Ser Pro Thr Met Gly Ser Ser Val Met
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Gly Thr Gln Met Asn Val Ile Gly Gln Ser Ala Phe Gly Met Gln Gly
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Asn Pro Phe Phe Asn Pro Gln Asn Phe Ala Gln Pro Pro Thr Thr Met
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Pro Val Gln Ser Val His Glu Pro Thr Gly Pro Ser Glu Ser Tyr Leu
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His Ser Arg Val Arg Pro Lys Val Thr Val Leu Asn Tyr Ala Ser Pro
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145 150 155 160
Arg His Thr Val Ala Asn Ala His Ser Asp Ile Gln Leu Leu Ala Met
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Ala Thr Met Met His Ser Gly Leu Gly Glu Glu Ala Ser Ser Glu Asn
180 185 190
Lys Cys Leu Leu Leu Pro Pro Ser Phe Pro Pro Pro His Arg Gln Cys
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His Leu

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<212> DNA
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Asp Ile Arg Ser Lys Glu Met Ser Leu Val Glu Glu Val Pro His Leu
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Leu Ile Ser Gly Met Glu Ile Pro Lys Thr Leu Ser Pro Val His Leu
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Phe Arg Arg Gly Leu Lys Val Gln Ala Gln Leu Asn Thr Glu Gln Leu
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<213> Homo sapiens

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<222> (96)..(2168)

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<212> PRT
<213> Homo sapiens

<400> 18737

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Gly Asp Tyr Thr Tyr Gln Leu Thr Val Thr Asp Thr Ile Gly Gln Gln
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Pro Thr Ser Arg Ala Gly Ile Lys Gln Lys Gly Leu Leu Leu Ser Ser
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caagccacag aaacgggctc gctcgtgcca ggacacagca gtgtctttca aaaaatcaaa 2760
accagaagtt ttatcagcag caggaaggat gtgggactct gtccaagttc accgtcacca 2820
tcaagccact ggctgtggaa ggagtttgtc caacagggtc agtgtcacag ccacaacttc 2880
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<210> 18739
<211> 653
<212> PRT
<213> Homo sapiens

0088270.0450

<400> 18739

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Gln Pro Val Gln His Val Tyr Pro Ala Gln Val Gln Tyr Val Glu Gly
             20                  25                  30
Gly Asp Ala Val Tyr Thr Asn Gly Thr Ile Arg Thr Ala Tyr Thr Tyr
         35                  40                  45
Asn Pro Glu Pro Gln Met Tyr Ala Pro Ser Ser Thr Ala Ser Tyr Phe
     50                  55                  60
Glu Ala Pro Gly Gly Ala Gln Val Thr Val Ala Ala Ser Ser Pro Pro
 65                  70                  75                  80
Ala Val Pro Ser His Ser Met Val Gly Ile Thr Met Asp Val Gly Gly
                 85                  90                  95
Ser Pro Ile Val Ser Ser Ala Gly Ala Tyr Leu Ile His Gly Gly Met
            100                 105                 110
Asp Ser Thr Arg His Ser Leu Ala His Thr Ser Arg Ser Ser Pro Ala
        115                 120                 125
Thr Leu Gln Trp Leu Leu Asp Asn Tyr Glu Thr Ala Glu Gly Val Ser
    130                 135                 140
Leu Pro Arg Ser Ser Leu Tyr Asn His Tyr Leu Arg His Cys Gln Glu
145                 150                 155                 160
His Lys Leu Asp Pro Val Asn Ala Ala Ser Phe Gly Lys Leu Ile Arg
                165                 170                 175
Ser Val Phe Met Gly Leu Arg Thr Arg Arg Leu Gly Thr Arg Gly Asn
            180                 185                 190
Ser Lys Tyr His Tyr Tyr Gly Ile Arg Leu Lys Pro Asp Ser Pro Leu
        195                 200                 205
Asn Arg Leu Gln Glu Asp Thr Gln Tyr Met Ala Met Arg Gln Gln Pro
    210                 215                 220
Met His Gln Lys Pro Arg Tyr Arg Pro Ala Gln Lys Thr Asp Ser Leu
225                 230                 235                 240
Gly Asp Ser Gly Ser His Ser Gly Leu His Ser Thr Pro Glu Gln Thr
                245                 250                 255
Met Ala Val Gln Ser Gln His His Gln Gln Tyr Ile Asp Val Ser His
            260                 265                 270
Val Phe Pro Glu Phe Pro Ala Pro Asp Leu Gly Ser Phe Leu Leu Gln
        275                 280                 285
Asp Gly Val Thr Leu His Asp Val Lys Ala Leu Gln Leu Val Tyr Arg
    290                 295                 300
Arg His Cys Glu Ala Thr Val Asp Val Val Met Asn Leu Gln Phe His
305                 310                 315                 320
Tyr Ile Glu Lys Leu Trp Leu Ser Phe Trp Asn Ser Lys Ala Ser Ser
                325                 330                 335
Ser Asp Gly Pro Thr Ser Leu Pro Ala Ser Asp Glu Asp Pro Glu Gly
            340                 345                 350
Ala Val Leu Pro Lys Asp Lys Leu Ile Ser Leu Cys Gln Cys Asp Pro
        355                 360                 365
Ile Leu Arg Trp Met Arg Ser Cys Asp His Ile Leu Tyr Gln Ala Leu
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0050456-0050800

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    370                 375                 380
Val Glu Ile Leu Ile Pro Asp Val Leu Arg Pro Val Pro Ser Thr Leu
385                 390                 395                 400
Thr Gln Ala Ile Arg Asn Phe Ala Lys Ser Leu Glu Gly Trp Leu Thr
                405                 410                 415
Asn Ala Met Ser Asp Phe Pro Gln Gln Val Ile Gln Thr Lys Val Gly
            420                 425                 430
Val Val Ser Ala Phe Ala Gln Thr Leu Arg Arg Tyr Thr Ser Leu Asn
        435                 440                 445
His Leu Ala Gln Ala Ala Arg Ala Val Leu Gln Asn Thr Ser Gln Ile
    450                 455                 460
Asn Gln Met Leu Ser Asp Leu Asn Arg Val Asp Phe Ala Asn Val Gln
465                 470                 475                 480
Glu Gln Ala Ser Trp Val Cys Gln Cys Glu Glu Ser Val Val Gln Arg
                485                 490                 495
Leu Glu Gln Asp Phe Lys Leu Thr Leu Gln Gln Gln Ser Ser Leu Asp
            500                 505                 510
Gln Trp Ala Ser Trp Leu Asp Ser Val Val Thr Gln Val Leu Lys Gln
        515                 520                 525
His Ala Gly Ser Pro Ser Phe Pro Lys Ala Ala Arg Gln Phe Leu Leu
    530                 535                 540
Lys Trp Ser Phe Tyr Ser Ser Met Val Ile Arg Asp Leu Thr Leu Arg
545                 550                 555                 560
Ser Ala Ala Ser Phe Gly Ser Phe His Leu Ile Arg Leu Leu Tyr Asp
                565                 570                 575
Glu Tyr Met Phe Tyr Leu Val Glu His Arg Val Ala Glu Ala Thr Gly
            580                 585                 590
Glu Thr Pro Ile Ala Val Met Gly Glu Phe Asn Asp Leu Ala Ser Leu
        595                 600                 605
Ser Leu Thr Leu Leu Asp Lys Asp Asp Met Gly Asp Glu Gln Arg Gly
    610                 615                 620
Ser Glu Ala Gly Pro Asp Ala Arg Ser Leu Gly Glu Pro Leu Val Lys
625                 630                 635                 640
Arg Glu Arg Ser Asp Pro Asn His Ser Leu Gln Gly Ile
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<210> 18740
<211> 2150
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (172)..(1014)

<400> 18740
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0960460.0758800

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aagcaggcta ccagcaattt tgagaacttg caaaaacagc ttgcaaggaa aatgaagctt 180
cctattttca tagcagatgc attcacagca agagcatttc gtgggaatcc tgctgctgtt 240
tgcctcctag aaaatgaatt ggatgaagac atgcatcaga aaattgcaag ggagatgaac 300
ctctctgaaa ctgcttttat ccgaaaactg cacccgacag acaactttgc acaaagttcc 360
tgctttggac tgagatggtt tacaccagcg agtgaggtcc cactctgtgg ccatgccacc 420
ctggcttctg cagctgtgct gtttcacaaa ataaaaaaca tgaatagcac gctcacgttt 480
gtcactctga gtggagaact aagggccaga cgagcagagg acggcatcgt cctggacttg 540
cctctttatc cagcccaccc ccaggacttc catgaagtag aggacttgat aaagactgcc 600
ataggcaaca cactggtcca ggacatctgt tattctccag atacccaaaa gctcctcgtc 660
cgcctcagtg acgtttacaa caggtcgttt ctggagaacc tgaaagtgaa cacggagaat 720
ctgctgcaag ttgaaaacac agggaaggtg aaagggctta ttcttaccct taaaggagag 780
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atctggggaa gaaagaaatg catgcttttc agtgttccca ccgaggagga gagctgggaa 960
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gcggaagttg cagtgagcag agatcacacc actgcactcc agcctgggca acagagtaag 1440
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<210> 18741
<211> 281
<212> PRT
<213> Homo sapiens

<400> 18741
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Arg Gly Asn Pro Ala Ala Val Cys Leu Leu Glu Asn Glu Leu Asp Glu
20 25 30
Asp Met His Gln Lys Ile Ala Arg Glu Met Asn Leu Ser Glu Thr Ala

0962960.07800

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          35                  40                  45
Phe Ile Arg Lys Leu His Pro Thr Asp Asn Phe Ala Gln Ser Ser Cys
      50                  55                  60
Phe Gly Leu Arg Trp Phe Thr Pro Ala Ser Glu Val Pro Leu Cys Gly
 65                  70                  75                  80
His Ala Thr Leu Ala Ser Ala Ala Val Leu Phe His Lys Ile Lys Asn
                 85                  90                  95
Met Asn Ser Thr Leu Thr Phe Val Thr Leu Ser Gly Glu Leu Arg Ala
            100                 105                 110
Arg Arg Ala Glu Asp Gly Ile Val Leu Asp Leu Pro Leu Tyr Pro Ala
        115                 120                 125
His Pro Gln Asp Phe His Glu Val Glu Asp Leu Ile Lys Thr Ala Ile
    130                 135                 140
Gly Asn Thr Leu Val Gln Asp Ile Cys Tyr Ser Pro Asp Thr Gln Lys
145                 150                 155                 160
Leu Leu Val Arg Leu Ser Asp Val Tyr Asn Arg Ser Phe Leu Glu Asn
                165                 170                 175
Leu Lys Val Asn Thr Glu Asn Leu Leu Gln Val Glu Asn Thr Gly Lys
            180                 185                 190
Val Lys Gly Leu Ile Leu Thr Leu Lys Gly Glu Pro Gly Gly Gln Thr
        195                 200                 205
Gln Ala Phe Asp Phe Tyr Ser Arg Tyr Phe Ala Pro Trp Val Gly Val
    210                 215                 220
Ala Glu Asp Pro Val Thr Gly Leu His Met Leu Phe Ser Ala Ala Thr
225                 230                 235                 240
Gly Pro Ser Ile Trp Gly Arg Lys Lys Cys Met Leu Phe Ser Val Pro
                245                 250                 255
Thr Glu Glu Glu Ser Trp Glu Phe Pro Phe Val Gln Thr Glu Gly Leu
            260                 265                 270
Thr Leu Glu Glu Val Gln Leu Leu Phe
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<210> 18742
<211> 2591
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (884)..(1408)

<400> 18742
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caggggtgga gacaaggatg gatcttgagg tgctgggatt gtgagacagg aggtgggtag 120
tatacttggc ggggaggccc atgtgcgtaa ggctgagagg tggaaagagc tggctgctat 180
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0050050-0050450

0050050.0004600

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<210> 18743
<211> 175
<212> PRT
<213> Homo sapiens

<400> 18743
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            20                  25                  30
Pro Ala Gln Lys Glu Pro His Arg Gly Gln Thr Ser Met Leu Gly Gln
        35                  40                  45
Pro Pro Ser Ser Arg Gly Gln Cys Gly Leu Arg Lys Asp Arg Leu Gly
    50                  55                  60
Gly Ala Pro Ala Glu Ala Gly Gly Trp Gly His Val Val Asp Ser Ala
65                  70                  75                  80
Glu Pro Trp Ser Cys Val Ser Gly Ser Gly Cys Cys Ser Leu Met Ser
                85                  90                  95
Gln Gly Pro Ser Gly Gly Gly Val Ser His Leu Gly Glu Gly Asp Pro
            100                 105                 110
His Pro Ala Gly Glu Pro Gln Pro Trp Ala Leu Pro Arg Ala Ser Leu
        115                 120                 125
Leu Ser Val Asp Ser His Leu Gly Glu Thr His Val Pro Val Cys Ile
    130                 135                 140
His Arg Cys Met Tyr Arg Leu Cys Glu Ser Cys Ile His Phe Ser Gly
145                 150                 155                 160
Val His Ala Cys Val His Leu Gln Asn Pro Gly Gly Pro Gly Phe
                165                 170                 175
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0050250-0050950

<210> 18744
<211> 2651
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (91)..(1578)

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<210> 18745
<211> 496
<212> PRT
<213> Homo sapiens

<400> 18745

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Ala	Ala	Pro	Arg	Val	Pro	Phe	His	Cys	Ser	Glu	Cys	Gly	Lys	Ser	Phe
			20					25				30			
Arg	Tyr	Arg	Ser	Asp	Leu	Arg	Arg	His	Phe	Ala	Arg	His	Thr	Ala	Leu
		35					40					45			
Lys	Pro	His	Ala	Cys	Pro	Arg	Cys	Gly	Lys	Gly	Phe	Lys	His	Ser	Phe
	50					55					60				
Asn	Leu	Ala	Asn	His	Leu	Arg	Ser	His	Thr	Gly	Glu	Arg	Pro	Tyr	Arg
65					70					75					80

0060050-020800

0052049.0052049

Cys Ser Ala Cys Pro Lys Gly Phe Arg Asp Ser Thr Gly Leu Leu His
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His Gln Val Val His Thr Gly Glu Lys Pro Tyr Cys Cys Leu Val Cys
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Glu Leu Arg Phe Ser Ser Arg Ser Ser Leu Gly Arg His Leu Arg Arg
115 120 125
Gln His Arg Gly Val Leu Pro Ser Pro Leu Gln Pro Gly Pro Gly Leu
130 135 140
Pro Ala Leu Ser Ala Pro Cys Ser Val Cys Cys Asn Val Gly Pro Cys
145 150 155 160
Ser Val Cys Gly Gly Ser Gly Ala Gly Gly Gly Glu Gly Pro Glu Gly
165 170 175
Ala Gly Ala Gly Leu Gly Ser Trp Gly Leu Ala Glu Ala Ala Ala Ala
180 185 190
Ala Ala Ala Ser Leu Pro Pro Phe Ala Cys Gly Ala Cys Ala Arg Arg
195 200 205
Phe Asp His Gly Arg Glu Leu Ala Ala His Trp Ala Ala His Thr Asp
210 215 220
Val Lys Pro Phe Lys Cys Pro Arg Cys Glu Arg Asp Phe Asn Ala Pro
225 230 235 240
Ala Leu Leu Glu Arg His Lys Leu Thr His Asp Leu Gln Gly Pro Gly
245 250 255
Ala Pro Pro Ala Gln Ala Trp Ala Ala Gly Pro Gly Ala Gly Pro Glu
260 265 270
Thr Ala Gly Glu Gly Thr Ala Ala Glu Ala Gly Asp Ala Pro Leu Ala
275 280 285
Ser Asp Arg Arg Leu Leu Leu Gly Pro Ala Gly Gly Gly Val Pro Lys
290 295 300
Leu Gly Gly Leu Leu Pro Glu Gly Gly Gly Glu Ala Pro Ala Pro Ala
305 310 315 320
Ala Ala Ala Glu Pro Ser Glu Asp Thr Leu Tyr Gln Cys Asp Cys Gly
325 330 335
Thr Phe Phe Ala Ser Ala Ala Ala Leu Ala Ser His Leu Glu Ala His
340 345 350
Ser Gly Pro Ala Thr Tyr Gly Cys Gly His Cys Gly Ala Leu Tyr Ala
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Ala Leu Ala Ala Leu Glu Glu His Arg Arg Val Ser His Gly Glu Gly
370 375 380
Gly Gly Glu Glu Ala Ala Ala Ala Ala Arg Glu Arg Glu Pro Ala Ser
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Gly Glu Pro Pro Ser Gly Ser Gly Arg Gly Lys Lys Ile Phe Gly Cys
405 410 415
Ser Glu Cys Glu Lys Leu Phe Arg Ser Pro Arg Asp Leu Glu Arg His
420 425 430
Val Leu Val His Thr Gly Glu Lys Pro Phe Pro Cys Leu Glu Cys Gly
435 440 445
Lys Phe Phe Arg His Glu Cys Tyr Leu Lys Arg His Arg Leu Leu His
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Gly Thr Glu Arg Pro Phe Pro Cys His Ile Cys Gly Lys Gly Phe Ile
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<212> DNA
<213> Homo sapiens

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<222> (99)..(1868)

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<212> PRT
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35 40 45
Lys Ala Asp Ile Lys Pro Val Ile Val Thr Asp Ser Ser Val Thr Thr
50 55 60
Ser Leu Gln Thr Ala Asp Lys Thr Pro Thr Pro Ser His Tyr Pro Leu
65 70 75 80
Ser Cys Pro Ser Gly Ile Ser Thr Gln Asn Ser Leu Ser Cys Ser Pro
85 90 95
Pro His Gln Ser Pro Ala Leu Glu Asp Ile Gly Cys Ser Ser Cys Ala
100 105 110
Glu Lys Ser Lys Lys Thr Pro Cys Gly Thr Ala Asn Gly Pro Val Asn
115 120 125
Thr Glu Val Lys Ala Asn Gly Pro His Leu Tyr Ser Ser Pro Thr Asp
130 135 140
Ser Thr Asp Pro Arg Arg Leu Pro Gly Ala Asn Thr Pro Leu Pro Gly
145 150 155 160
Leu Ser His Arg Gln Gly Trp Pro Arg Pro Leu Thr Pro Pro Ala Ala
165 170 175
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0020020 .09/02/98

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Thr Pro Pro Gln Ala Ala Gly Asp Gly Ile Leu Ala Thr Thr Ala Asn
            260                 265                 270
Gln Arg Phe Ser Ser Pro Ala Pro Ser Ser Asp Gly Lys Val Ser Pro
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Gly Thr Leu Ser Ile Gly Ser Ala Leu Thr Val Pro Ser Phe Pro Ala
    290                 295                 300
Asn Ser Thr Ala Met Val Asp Leu Thr Asn Ser Leu Arg Ala Phe Met
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Asp Val Asn Gly Glu Ile Glu Ile Asn Met Leu Asp Glu Lys Leu Ile
                325                 330                 335
Lys Phe Leu Ala Leu Gln Arg Ile His Gln Leu Tyr Pro Ser Arg Val
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Gln Pro Ser Pro Gly Ser Val Gly Thr His Gln Leu Ala Ser Gly Gly
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His His Ile Glu Val Gln Arg Lys Glu Val Gln Ala Arg Ala Val Phe
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Leu Tyr Ile Gly Thr Gly Ala Asp Met Asp Val Cys Leu Thr Asn Tyr
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Gly His Cys Asn Tyr Val Ser Gly Lys His Ala Cys Ile Phe Tyr Asp
            420                 425                 430
Glu Asn Thr Lys His Tyr Glu Leu Leu Asn Tyr Ser Glu His Gly Thr
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Pro Thr Pro Pro Ser Ser Ile Val Ala Lys Val Gln Ser Val Ile Arg
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Arg Arg Arg His Gln Lys Gln Asp Glu Glu Pro Ser Glu Glu Ala Ala
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Lys Ala Ser Ser Ser Ser Leu Ile Gly Gly Ser Gly Ala Gly Trp Glu
        515                 520                 525
Gly Thr Ala Leu Leu His His Gly Ser Tyr Ile Lys Leu Gly Cys Leu
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<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 18749

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Phe	Asn	Glu	Leu	Met	Val	Met	Phe	Arg	Val	Arg	Pro	Thr	Val	Leu	Met
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Pro	Leu	Trp	Asn	Val	Leu	Gly	Phe	Ala	Leu	Gly	Ala	Gly	Thr	Ala	Leu
		115					120					125			
Leu	Gly	Lys	Glu	Gly	Ala	Met	Ala	Cys	Thr	Val	Ala	Val	Glu	Glu	Ser
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Ile	Ala	His	His	Tyr	Asn	Asn	Gln	Ile	Arg	Thr	Leu	Met	Glu	Glu	Asp
145					150					155					160
Pro	Glu	Lys	Tyr	Glu	Glu	Leu	Leu	Gln	Leu	Ile	Lys	Lys	Phe	Arg	Asp
				165					170					175	
Glu	Glu	Leu	Glu	His	His	Asp	Ile	Gly	Leu	Asp	His	Asp	Ala	Glu	Leu
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Ala	Pro	Ala	Tyr	Ala	Val	Leu	Lys	Ser	Ile	Ile	Gln	Ala	Gly	Cys	Arg
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<211> 2192

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<212> DNA
<213> Homo sapiens

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<211> 686
<212> PRT
<213> Homo sapiens

<400> 18751

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Val Ser Arg Thr Asp Gly Thr Val Glu Ile Tyr Asn Leu Ser Ala Asn
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Tyr Phe Gln Glu Lys Phe Phe Pro Gly His Glu Ser Arg Ala Thr Glu
    50                  55                  60
Ala Leu Cys Trp Ala Glu Gly Gln Arg Leu Phe Ser Ala Gly Leu Asn
65                  70                  75                  80
Gly Glu Ile Met Glu Tyr Asp Leu Gln Ala Leu Asn Ile Lys Tyr Ala
                85                  90                  95
Met Asp Ala Phe Gly Gly Pro Ile Trp Ser Met Ala Ala Ser Pro Ser
            100                 105                 110
Gly Ser Gln Leu Leu Val Gly Cys Glu Asp Gly Ser Val Lys Leu Phe
        115                 120                 125
Gln Ile Thr Pro Asp Lys Ile Gln Phe Glu Arg Asn Phe Asp Arg Gln
    130                 135                 140
Lys Ser Arg Ile Leu Ser Leu Ser Trp His Pro Ser Gly Thr His Ile
145                 150                 155                 160
Ala Ala Gly Ser Ile Asp Tyr Ile Ser Val Phe Asp Val Lys Ser Gly
                165                 170                 175
Ser Ala Val His Lys Met Ile Val Asp Arg Gln Tyr Met Gly Val Ser
            180                 185                 190
Lys Arg Lys Cys Ile Val Trp Gly Val Ala Phe Leu Ser Asp Gly Thr
        195                 200                 205
Ile Ile Ser Val Asp Ser Ala Gly Lys Val Gln Phe Trp Asp Ser Ala
    210                 215                 220
Thr Gly Thr Leu Val Lys Ser His Leu Ile Ala Asn Ala Asp Val Gln
225                 230                 235                 240
Ser Ile Ala Val Ala Asp Gln Glu Asp Ser Phe Val Val Gly Thr Ala
                245                 250                 255
Glu Gly Thr Val Phe His Phe Gln Leu Val Pro Val Thr Ser Asn Ser
            260                 265                 270
Ser Glu Lys Gln Trp Val Arg Thr Lys Pro Phe Gln His His Thr His
        275                 280                 285
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Thr Asp Thr His Leu Val Phe Arg Pro Leu Met Glu Lys Val Glu Val
305                 310                 315                 320
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Leu Lys Thr Lys Gly Pro Glu Asn Ile Ile Cys Ser Cys Ile Ser Pro
385                 390                 395                 400
Cys Gly Ser Trp Ile Ala Tyr Ser Thr Val Ser Arg Phe Phe Leu Tyr
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Arg Leu Asn Tyr Glu His Asp Asn Ile Ser Leu Lys Arg Val Ser Lys
            420                 425                 430
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Ser Thr Lys Leu Phe Val Ala Ser Asn Gln Gly Ala Leu His Ile Val
    450                 455                 460
Gln Leu Ser Gly Gly Ser Phe Lys His Leu His Ala Phe Gln Pro Gln
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                485                 490                 495
Asn Trp Leu Ala Ala Ser Gly Thr Ser Ala Gly Val His Val Tyr Asn
            500                 505                 510
Val Lys Gln Leu Lys Leu His Cys Thr Val Pro Ala Tyr Asn Phe Pro
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545                 550                 555                 560
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Lys Ser Leu Pro Leu Pro Asn Asp Lys Thr Leu Leu Tyr Asn Pro Phe
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625                 630                 635                 640
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<212> PRT
<213> Homo sapiens

<400> 18770

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			20					25					30		
Ser	Met	Leu	Val	Leu	Glu	Ser	Leu	Glu	Lys	Ala	Glu	Val	Glu	Val	Ala
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Ser	Gly	Gly	Ser	Gly	Lys	Leu	Gly	His	Pro	Arg	Leu	His	Gln	Leu	Leu
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Ala	Leu	Thr	Leu	Trp	Lys	Glu	Gln	Asn	Tyr	Cys	Glu	Ser	Arg	Tyr	His
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Phe	Leu	His	Ser	Ala	Asp	Gly	Glu	Gly	Cys	Ala	Asn	Met	Leu	Val	Glu
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Tyr	Ser	Thr	Ser	Arg	Gly	Phe	Arg	Ser	Glu	Val	Asp	Met	Phe	Val	Ala
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Gln	Ala	Val	Leu	Gln	Phe	Leu	Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser
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Val	Val	Phe	Thr	Thr	Tyr	Thr	Gln	Lys	His	Pro	Ser	Ile	Glu	Asp	Gly
				165					170					175	
Pro	Pro	Phe	Val	Glu	Pro	Leu	Leu	Asn	Phe	Ile	Trp	Phe	Leu	Leu	Leu
			180					185					190		
Ala	Val	Asp	Gly	Gly	Lys	Leu	Thr	Val	Phe	Thr	Val	Leu	Cys	Glu	Gln
		195					200					205			
Tyr	Gln	Pro	Ser	Leu	Arg	Arg	Asp	Pro	Met	Tyr	Asn	Glu	Tyr	Leu	Asp
	210					215					220				
Arg	Ile	Gly	Gln	Leu	Phe	Phe	Gly	Val	Pro	Pro	Lys	Gln	Thr	Ser	Ser
225					230					235					240
Tyr	Gly	Gly	Leu	Leu	Gly	Asn	Leu	Leu	Thr	Ser	Leu	Met	Gly	Ser	Ser
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Leu Asp

<210> 18771
<211> 1889
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<222> (994)..(1617)

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<211> 208
<212> PRT
<213> Homo sapiens

<400> 18773
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Ser Ala Phe Arg Arg Leu Leu Val Leu Leu Leu Ile Leu Leu Leu Leu
35 40 45

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Ser Gly Gly Arg Gly Arg Val Tyr Arg Val Glu Gln Glu Gly Glu Met
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Gly Ala Trp Pro Leu Lys His Ser Ile Ala Gly Ser Arg Leu Gly Leu
 65                  70                  75                  80
Arg Ile Thr Ala Gly Gln Leu Gly Trp Cys Arg Ala Phe His Lys Arg
                 85                  90                  95
Trp Arg Ser Arg Val Phe Ser Gly Leu Pro Arg Gly Arg Gly Asp Ser
            100                 105                 110
Leu Ser Trp Ser Ala Gly Trp Arg Val Phe Phe Leu Asp Thr Gly Ala
        115                 120                 125
Ala Ala Gly Pro Trp Ser Thr Trp Arg Arg Ala Ser Ser Arg Met Leu
    130                 135                 140
Ala Leu Pro Leu Asp Gln Gly Ala Leu Leu Leu Ala Leu Ser Gly His
145                 150                 155                 160
Asp Arg Gly Leu Ala Leu Leu Ser Cys Gly His Phe Ser Leu Cys Leu
                165                 170                 175
Leu Gly Ser Tyr Leu Cys Val Ala Trp Phe Phe Leu Gly Cys Gly Cys
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Gly Ala Arg Ile Ile Val Val Leu Gly Trp Arg Val Val Ala Ala Asp
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<212> DNA
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<222> (33)..(2627)

<400> 18774

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<211> 865
<212> PRT
<213> Homo sapiens

<400> 18775

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			20					25					30		
Lys	Asn	Pro	Thr	Arg	Trp	Ser	Thr	Thr	Ala	Gly	Phe	Leu	Lys	Gln	Asn
		35					40					45			
Thr	Ala	Gly	Ser	Pro	Lys	Ala	Cys	Asp	Arg	Lys	Lys	Asp	Glu	Asn	Tyr
	50					55					60				
Arg	Ser	Leu	Pro	Arg	Asp	Thr	Ser	Asn	Trp	Ser	Asn	Gln	Phe	Gln	Arg
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        115                 120                 125
Pro Asn Phe Ser Leu Asp Asp Met Val Lys Leu Val Glu Val Pro Asn
    130                 135                 140
Asp Gly Gly Pro Leu Gly Ile His Val Val Pro Phe Ser Ala Arg Gly
145                 150                 155                 160
Gly Arg Thr Leu Gly Leu Leu Val Lys Arg Leu Glu Lys Gly Gly Lys
                165                 170                 175
Ala Glu His Glu Asn Leu Phe Arg Glu Asn Asp Cys Ile Val Arg Ile
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Asn Asp Gly Asp Leu Arg Asn Arg Arg Phe Glu Gln Ala Gln His Met
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Phe Arg Gln Ala Met Arg Thr Pro Ile Ile Trp Phe His Val Val Pro
    210                 215                 220
Ala Ala Asn Lys Glu Gln Tyr Glu Gln Leu Ser Gln Ser Glu Lys Asn
225                 230                 235                 240
Asn Tyr Tyr Ser Ser Arg Phe Ser Pro Asp Ser Gln Tyr Ile Asp Asn
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Arg Ser Val Asn Ser Ala Gly Leu His Thr Val Gln Arg Ala Pro Arg
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Leu Asn His Pro Pro Glu Gln Ile Asp Ser His Ser Arg Leu Pro His
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Ser Ala His Pro Ser Gly Lys Pro Pro Ser Ala Pro Ala Ser Ala Pro
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Gln Asn Val Phe Ser Thr Thr Val Ser Ser Gly Tyr Asn Thr Lys Lys
305                 310                 315                 320
Ile Gly Lys Arg Leu Asn Ile Gln Leu Lys Lys Gly Thr Glu Gly Leu
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Gly Phe Ser Ile Thr Ser Arg Asp Val Thr Ile Gly Gly Ser Ala Pro
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Ile Tyr Val Lys Asn Ile Leu Pro Arg Gly Ala Ala Ile Gln Asp Gly
        355                 360                 365
Arg Leu Lys Ala Gly Asp Arg Leu Ile Glu Val Asn Gly Val Asp Leu
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Val Gly Lys Ser Gln Glu Glu Val Val Ser Leu Leu Arg Ser Thr Lys
385                 390                 395                 400
Met Glu Gly Thr Val Ser Leu Leu Val Phe Arg Gln Glu Asp Ala Phe
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His Pro Arg Glu Leu Asn Ala Glu Pro Ser Gln Met Gln Ile Pro Lys
            420                 425                 430
Glu Thr Lys Ala Glu Asp Glu Asp Ile Val Leu Thr Pro Asp Gly Thr
        435                 440                 445
Arg Glu Phe Leu Thr Phe Glu Val Pro Leu Ser Asp Ser Gly Ser Ala
    450                 455                 460
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Asp Leu Gly Ile Phe Val Lys Ser Ile Ile Asn Gly Gly Ala Ala Ser
485 490 495
Lys Asp Gly Arg Leu Arg Val Asn Asp Gln Leu Ile Ala Val Asn Gly
500 505 510
Glu Ser Leu Leu Gly Lys Thr Asn Gln Asp Ala Met Glu Thr Leu Arg
515 520 525
Arg Ser Met Ser Thr Glu Gly Asn Lys Arg Gly Met Ile Gln Leu Ile
530 535 540
Val Ala Arg Arg Ile Ser Lys Cys Asn Glu Leu Lys Ser Pro Gly Ser
545 550 555 560
Pro Pro Gly Pro Glu Leu Pro Ile Glu Thr Ala Leu Asp Asp Arg Glu
565 570 575
Arg Arg Ile Ser His Ser Leu Tyr Ser Gly Ile Glu Gly Leu Asp Glu
580 585 590
Ser Pro Ser Arg Asn Ala Ala Leu Ser Arg Ile Met Gly Lys Tyr Gln
595 600 605
Leu Ser Pro Thr Val Asn Met Pro Gln Asp Asp Thr Val Ile Ile Glu
610 615 620
Asp Asp Arg Leu Pro Val Leu Pro Pro His Leu Ser Asp Gln Ser Ser
625 630 635 640
Ser Ser Ser His Asp Asp Val Gly Phe Val Thr Ala Asp Ala Gly Thr
645 650 655
Trp Ala Lys Ala Ala Ile Ser Asp Ser Ala Asp Cys Ser Leu Ser Pro
660 665 670
Asp Val Asp Pro Val Leu Ala Phe Gln Arg Glu Gly Phe Gly Arg Gln
675 680 685
Thr Asp Glu Thr Lys Leu Asn Thr Val Asp Asp Gln Lys Ala Gly Ser
690 695 700
Pro Ser Arg Asp Val Gly Pro Ser Leu Gly Leu Lys Lys Ser Ser Ser
705 710 715 720
Leu Glu Ser Leu Gln Thr Ala Val Ala Glu Val Thr Leu Asn Gly Asp
725 730 735
Ile Pro Phe His Arg Pro Arg Pro Arg Ile Ile Arg Gly Arg Gly Cys
740 745 750
Asn Glu Ser Phe Arg Ala Ala Ile Asp Lys Ser Tyr Asp Lys Pro Ala
755 760 765
Val Asp Asp Asp Asp Glu Gly Met Glu Thr Leu Glu Glu Asp Thr Glu
770 775 780
Glu Ser Ser Arg Ser Gly Arg Glu Ser Val Ser Thr Ala Ser Asp Gln
785 790 795 800
Pro Ser His Ser Leu Glu Arg Gln Met Asn Gly Asn Gln Glu Lys Gly
805 810 815
Asp Lys Thr Asp Arg Lys Lys Asp Lys Thr Gly Lys Glu Lys Lys Lys
820 825 830
Asp Arg Asp Lys Glu Lys Asp Lys Met Lys Ala Lys Lys Gly Met Leu
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Lys Gly Leu Gly Asp Met Phe Ser Leu Ala Lys Leu Lys Pro Glu Lys
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Arg
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<211> 2566
<212> DNA
<213> Homo sapiens

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<222> (44)..(343)

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<212> PRT
<213> Homo sapiens

<400> 18777
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35 40 45
Glu Phe Lys Met Ala Val Ser Tyr Asp Cys Thr Thr Ala Leu Gln Pro
50 55 60
Gly Gln Gln Ser Lys Pro Ile Ser Lys Arg Lys Lys Glu Ile Leu Lys
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<213> Homo sapiens

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<211> 109
<212> PRT
<213> Homo sapiens

<400> 18779
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35 40 45
Tyr Ala Cys Val Cys Thr His Val Cys Ala Tyr Val His Val Cys Thr
50 55 60
Cys Val Cys Ala Cys Val His Thr Thr Cys Ala Val Ser Ile Gly Leu
65 70 75 80
Ser Ser Tyr Gln Val Gly Leu Gly Arg Leu Ile Ala Trp Lys Gly Phe
85 90 95
Gly Asp Ser His Ser Pro Asn Arg Trp Glu Lys Leu Phe
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<211> 1795
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<213> Homo sapiens

<220>
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<211> 302
<212> PRT
<213> Homo sapiens

<400> 18781
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35 40 45
Leu Ala Ala Phe Lys Ser Ala Lys His Arg Pro Glu Asp Val Val Gln
50 55 60
Phe Leu Val Ser Lys Lys Tyr Ser Glu Ile Glu Glu Phe Tyr Gln Lys
65 70 75 80
Leu Ser Ser Arg Tyr Ala Ala Ala Ser Leu Pro Pro Leu Pro Arg Lys
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Val Leu Phe Val Gly Glu Ser Asp Ile Arg Glu Arg Arg Ala Val Phe
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Asn Glu Ile Leu Arg Cys Val Ser Lys Asp Ala Glu Leu Ala Gly Ser
115 120 125
Pro Glu Leu Leu Glu Phe Leu Gly Thr Arg Ser Pro Gly Ala Ala Gly
130 135 140
Leu Thr Ser Arg Asp Ser Ser Val Leu Asp Gly Thr Asp Ser Gln Thr
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Glu Ser Leu Glu Glu Glu Glu Ala Leu Asp Pro Leu Gly Ile Met Arg
195 200 205
Ser Lys Lys Pro Lys Lys His Arg Cys Glu Gly Lys Gly Leu Gly Pro
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Ala Gly Ser Glu Pro Pro His Pro Gln Gly Arg Pro Gly Arg Ser Leu
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Gly His Ser Thr Gln Asn Cys Met Val Pro Phe Ser Pro Gly Leu Trp
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Gly Gln Ser Arg Ser Leu Arg Ala Ala Gly Ala Ala Leu Thr Leu Gly
260 265 270

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (225)..(1133)

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<210> 18783
<211> 303
<212> PRT
<213> Homo sapiens

<400> 18783

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Thr Val Tyr Ile Thr Gly Arg His Leu Asp Thr Leu Arg Val Val Ala
        35                  40                  45
Gln Glu Ala Gln Ser Leu Gly Gly Gln Cys Val Pro Val Val Cys Asp
    50                  55                  60
Ser Asn Pro Glu Val Ser Asn Pro Lys Lys Pro Gly Arg Val Thr Asn
65                  70                  75                  80
Gln Leu Gln Tyr Leu His Lys Val Val Met Lys Ala Leu Trp Lys His
                85                  90                  95
Gln Phe Ala Trp Pro Phe Arg Gln Pro Val Asp Ala Val Lys Leu Gly
            100                 105                 110
Leu Pro Asp Tyr His Lys Ile Ile Lys Gln Pro Met Asp Met Gly Thr
        115                 120                 125
Ile Lys Arg Arg Leu Glu Asn Asn Tyr Tyr Trp Ala Ala Ser Glu Cys
    130                 135                 140
Met Gln Asp Phe Asn Thr Met Phe Thr Asn Cys Tyr Ile Tyr Asn Lys
145                 150                 155                 160
Pro Thr Asp Asp Ile Val Leu Met Ala Gln Thr Pro Glu Lys Ile Phe
                165                 170                 175
Leu Gln Lys Val Ala Ser Met Pro Gln Glu Glu Gln Glu Leu Val Val
            180                 185                 190
Thr Ile Pro Lys Asn Ser His Lys Lys Gly Ala Lys Leu Ala Ala Leu
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Gln Gly Ser Val Thr Ser Ala His Gln Val Pro Ala Val Ser Ser Val
    210                 215                 220
Ser His Thr Ala Leu Tyr Thr Pro Pro Pro Glu Ile Pro Thr Thr Val
225                 230                 235                 240
Leu Asn Ile Pro His Pro Ser Val Ile Ser Ser Pro Leu Leu Lys Ser
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Leu His Ser Ala Gly Pro Pro Leu Leu Ala Val Thr Ala Ala Pro Pro
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<211> 1908
<212> DNA
<213> Homo sapiens

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<222> (278)..(640)

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<211> 121
<212> PRT
<213> Homo sapiens

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<400> 18785
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Leu Leu Ala Thr Val Thr Glu Leu Ser Phe Asp Met Trp Gly Leu Val
35 40 45
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Lys Lys Val Leu Arg Asp Ser Arg Ile His His Leu Arg Leu Leu Asn
65 70 75 80
Ile Leu Gly Cys His Ala Val Phe Phe Met Ile Pro Thr Trp Val Leu
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<212> DNA
<213> Homo sapiens

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<222> (29)..(1234)

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<211> 402
<212> PRT
<213> Homo sapiens

<400> 18787
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35 40 45
Glu His Phe Gln Pro Lys Gln Ile Val Lys Ser Leu Ile Pro Ser Trp
50 55 60
Asn Lys Leu Val Phe Phe Glu Val Ser Pro Val Ser Phe His Gln Val
65 70 75 80
Ser Glu Val Leu Ser Glu Glu Lys Ser Arg Leu Ser Ile Ser Gly Trp
85 90 95
Phe His Gly Pro Ser Leu Thr Arg Pro Pro Asn Tyr Phe Glu Pro Pro
100 105 110
Ile Pro Arg Ser Pro His Ile Pro Gln Asp His Glu Ile Leu Tyr Asp

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145                 150                 155                 160
Pro Glu Lys Phe Thr Lys Val Cys Glu Ala Leu Glu His Gly His Val
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Glu Trp Ser Ser Arg Gly Pro Pro Asn Lys Arg Phe Tyr Glu Lys Ala
            180                 185                 190
Glu Glu Ser Lys Leu Pro Glu Ile Leu Lys Gly Cys Met Lys Leu Phe
        195                 200                 205
Arg Ser Glu Ala Leu Phe Leu Leu Leu Ser Asn Phe Thr Gly Leu Lys
    210                 215                 220
Leu His Phe Leu Ala Pro Ser Glu Glu Asp Glu Met Asn Asp Lys Lys
225                 230                 235                 240
Glu Ala Glu Thr Thr Asp Ile Thr Glu Glu Gly Thr Ser His Ser Pro
                245                 250                 255
Pro Glu Pro Glu Asn Asn Gln Met Ala Ile Ser Asn Asn Ser Gln Gln
            260                 265                 270
Ser Asn Glu Gln Thr Asp Pro Glu Pro Glu Glu Asn Glu Thr Lys Lys
        275                 280                 285
Glu Ser Ser Val Pro Met Cys Gln Gly Glu Leu Arg His Trp Lys Thr
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Gly His Tyr Thr Leu Ile His Asp His Ser Lys Ala Glu Phe Ala Leu
305                 310                 315                 320
Asp Leu Ile Leu Tyr Cys Gly Cys Glu Gly Trp Glu Pro Glu Tyr Gly
                325                 330                 335
Gly Phe Thr Ser Tyr Ile Ala Lys Gly Glu Asp Glu Glu Leu Leu Thr
            340                 345                 350
Val Asn Pro Glu Ser Asn Ser Leu Ala Leu Val Tyr Arg Asp Arg Glu
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Thr Leu Lys Phe Val Lys His Ile Asn His Arg Ser Leu Glu Gln Lys
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<212> DNA
<213> Homo sapiens

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US 2005/0059800 A1

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<212> DNA
<213> Homo sapiens

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<210> 18790
<211> 366
<212> PRT
<213> Homo sapiens

<400> 18790
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35 40 45
Ser Ala Ala Val Glu Glu Thr Ala Asp Ser Thr Ile Cys His Ile Leu
50 55 60
Asn Leu Tyr Arg Arg Asn Thr Trp Leu Tyr Gln Ala Leu Arg Glu Gly
65 70 75 80
Thr Arg Val Gln Ser Val Glu Gln Ile Arg Glu Val Ala Ser Gly Ala

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Phe Tyr Asp Pro Tyr Leu Gln Asp Gly Ile Glu Arg Ser Leu Gly Val
    130                 135                 140
Gln Arg Val Tyr Thr Leu Gln Asp Leu Leu Tyr Gln Ser Asp Cys Val
145                 150                 155                 160
Ser Leu His Cys Asn Leu Asn Glu His Asn His His Leu Ile Asn Asp
                165                 170                 175
Phe Thr Ile Lys Gln Met Arg Gln Gly Ala Phe Leu Val Asn Ala Ala
            180                 185                 190
Arg Gly Gly Leu Val Asp Glu Lys Ala Leu Ala Gln Ala Leu Lys Glu
        195                 200                 205
Gly Arg Ile Arg Gly Ala Ala Leu Asp Val His Glu Ser Glu Pro Phe
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Ser Phe Ala Gln Gly Pro Leu Lys Asp Ala Pro Asn Leu Ile Cys Thr
225                 230                 235                 240
Pro His Thr Ala Trp Tyr Ser Glu Gln Ala Ser Leu Glu Met Arg Glu
                245                 250                 255
Ala Ala Ala Thr Glu Ile Arg Arg Ala Ile Thr Gly Arg Ile Pro Glu
            260                 265                 270
Ser Leu Arg Asn Cys Val Asn Lys Glu Phe Phe Val Thr Ser Ala Pro
        275                 280                 285
Trp Ser Val Ile Asp Gln Gln Ala Ile His Pro Glu Leu Asn Gly Ala
    290                 295                 300
Thr Tyr Arg Tyr Pro Pro Gly Ile Val Gly Val Ala Pro Gly Gly Leu
305                 310                 315                 320
Pro Ala Ala Met Glu Gly Ile Ile Pro Gly Gly Ile Pro Val Thr His
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<211> 2019
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

<220>
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<222> (127)..(1224)

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<212> PRT
<213> Homo sapiens

<400> 18793

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His Tyr Phe Gly Leu Val Asn Phe Gly Asn Thr Cys Tyr Cys Asn Ser
        35                  40                  45
Val Leu Gln Ala Leu Tyr Phe Cys Arg Pro Phe Arg Glu Asn Val Leu
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Ala Tyr Lys Ala Gln Gln Lys Lys Lys Glu Asn Leu Leu Thr Cys Leu
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Ala Asp Leu Phe His Ser Ile Ala Thr Gln Lys Lys Lys Val Gly Val
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Ile Pro Pro Lys Lys Phe Ile Ser Arg Leu Arg Lys Glu Asn Asp Leu
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Phe Asp Asn Tyr Met Gln Gln Asp Ala His Glu Phe Leu Asn Tyr Leu
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Leu Asn Thr Ile Ala Asp Ile Leu Gln Glu Glu Lys Lys Gln Glu Lys
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Gln Asn Gly Lys Leu Lys Asn Gly Asn Met Asn Glu Pro Ala Glu Asn
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Asn Lys Pro Glu Leu Thr Trp Val His Glu Ile Phe Gln Gly Thr Leu
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Thr Asn Glu Thr Arg Cys Leu Asn Cys Glu Thr Val Ser Ser Lys Asp
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Glu Asp Phe Leu Asp Leu Ser Val Asp Val Glu Gln Asn Thr Ser Ile
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Thr His Cys Leu Arg Asp Phe Ser Asn Thr Glu Thr Leu Cys Ser Glu
    210                 215                 220
Gln Lys Tyr Tyr Cys Glu Thr Cys Cys Ser Lys Gln Glu Ala Gln Lys
225                 230                 235                 240
Arg Met Arg Val Lys Lys Leu Pro Met Ile Leu Ala Leu His Leu Lys
                245                 250                 255
Arg Phe Lys Tyr Met Glu Gln Leu His Arg Tyr Thr Lys Leu Ser Tyr
            260                 265                 270
Arg Val Val Phe Pro Leu Glu Leu Arg Leu Phe Asn Thr Ser Ser Asp
        275                 280                 285
Ala Val Asn Leu Asp Arg Met Tyr Asp Leu Val Ala Val Val Val His
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Cys Gly Ser Gly Pro Asn Arg Gly His Tyr Ile Thr Ile Val Lys Ser
305                 310                 315                 320
His Gly Phe Trp Leu Leu Phe Asp Asp Asp Ile Val Glu Lys Ile Asp
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Asn Ser Glu Ser Gly Tyr Ile Leu Phe Tyr Gln Ser Arg Glu
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (226)..(1386)

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<211> 387
<212> PRT
<213> Homo sapiens

<400> 18795
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35 40 45
Val Ile Leu Ala Val Ser Tyr Met Ser Gln Val Leu Glu Lys Glu Met
50 55 60
Lys Ala Gln Glu Gln Arg Leu Gly Ile Arg Ile Ser Met Ser His Glu
65 70 75 80
Glu Glu Pro Leu Gly Thr Ala Gly Pro Leu Ala Leu Ala Arg Asp Leu
85 90 95
Leu Ser Glu Thr Ala Asp Pro Phe Phe Val Leu Asn Ser Asp Val Ile
100 105 110
Cys Asp Phe Pro Phe Gln Ala Met Val Gln Phe His Arg His His Gly
115 120 125
Gln Glu Gly Ser Ile Leu Val Thr Lys Val Glu Glu Pro Ser Lys Tyr
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Gly Val Val Val Cys Glu Ala Asp Thr Gly Arg Ile His Arg Phe Val
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Glu Lys Pro Gln Val Phe Val Ser Asn Lys Ile Asn Ala Gly Met Tyr
                165                 170                 175
Ile Leu Ser Pro Ala Val Leu Arg Arg Ile Gln Leu Gln Pro Thr Ser
            180                 185                 190
Ile Glu Lys Glu Val Phe Pro Ile Met Ala Lys Glu Gly Gln Leu Tyr
        195                 200                 205
Ala Met Glu Leu Gln Gly Phe Trp Met Asp Ile Gly Gln Pro Lys Asp
    210                 215                 220
Phe Leu Thr Gly Met Cys Leu Phe Leu Gln Ser Leu Arg Gln Lys Gln
225                 230                 235                 240
Pro Glu Arg Leu Cys Ser Gly Pro Gly Ile Val Gly Asn Val Leu Val
                245                 250                 255
Asp Pro Ser Ala Arg Ile Gly Gln Asn Cys Ser Ile Gly Pro Asn Val
            260                 265                 270
Ser Leu Gly Pro Gly Val Val Val Glu Asp Gly Val Cys Ile Arg Arg
        275                 280                 285
Cys Thr Val Leu Arg Asp Ala Arg Ile Arg Ser His Ser Trp Leu Glu
    290                 295                 300
Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Ser Leu
305                 310                 315                 320
Trp Ala Gly Leu Gly Gly Glu Arg Gly Gly Glu Cys Ala Cys Leu Pro
                325                 330                 335
Asp Lys Ala Tyr Pro Leu Leu Glu Val Arg Met Glu Asn Val Thr Val
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Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu Tyr Leu Asn Gly Ala
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<212> DNA
<213> Homo sapiens

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<222> (18)..(1448)

<400> 18796
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<211> 477
<212> PRT
<213> Homo sapiens

<400> 18797
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35 40 45
Ser Val Asp Lys Thr Ala Cys Glu Cys Val Arg Ser Pro Arg Glu Ser
50 55 60

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65 70 75 80
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100 105 110
Leu Gln Gln Tyr Ser Pro Glu Ile Leu Ala Cys Gln Phe Leu Lys Lys
115 120 125
Tyr Phe Phe Leu Leu Asn Leu Lys Arg Ala Lys Glu Ser Ile Lys Leu
130 135 140
Ser Tyr Ser Asn Ser Pro Ser Val Trp Asp Thr Phe Ile Glu Gly Leu
145 150 155 160
Lys Glu Met Ala Ser Ser Asn Pro Val Tyr Met Glu Met Glu Lys Gly
165 170 175
Asp Leu Pro Thr Arg Leu Lys Leu Leu Asp Asp Glu Val Pro Phe Asp
180 185 190
Ser Pro Leu Leu Val Val Tyr Ala Thr Arg Leu Tyr Glu Lys Phe Gly
195 200 205
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210 215 220
Ser Asp Ile Ile Gln Leu Cys His His His Pro Ala Glu Phe Leu Ala
225 230 235 240
Tyr Leu Asp Ser Leu Val Lys Ser Arg Pro Glu Asp Gln Arg Ser Ser
245 250 255
Phe Leu Glu Ser Leu Leu Gln Pro Glu Ser Leu Arg Leu Asp Trp Leu
260 265 270
Leu Leu Ala Val Ser Leu Asp Ala Pro Pro Ser Thr Ser Thr Met Asp
275 280 285
Asp Glu Gly Tyr Pro Arg Pro His Ser His Leu Leu Ser Trp Gly Tyr
290 295 300
Ser Gln Leu Ile Leu His Leu Ile Lys Leu Pro Ala Asp Phe Ile Thr
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Lys Glu Lys Met Thr Asp Ile Cys Arg Ser Cys Gly Phe Trp Pro Gly
325 330 335
Tyr Leu Ile Leu Cys Leu Glu Leu Glu Arg Arg Arg Glu Ala Phe Thr
340 345 350
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355 360 365
Trp Ile Pro Glu Thr Val Glu Glu Trp Lys Leu Leu Leu His Leu Ile
370 375 380
Gln Ser Lys Ser Thr Arg Pro Ala Pro Gln Glu Ser Leu Asn Gly Ser
385 390 395 400
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Cys Gly Leu Ala Leu Glu Leu Ser Glu Lys Phe Thr Arg Thr Cys Asp
435 440 445

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<211> 1770
<212> DNA
<213> Homo sapiens

<400> 18798
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<211> 2441
<212> DNA
<213> Homo sapiens

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<220>
<221> CDS
<222> (431)..(1216)

<400> 18799
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<213> Homo sapiens

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Trp Ser Ser His Leu Ile Ala His Gln Arg Thr His Thr Gly Glu Lys
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115 120 125
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165 170 175
Pro Tyr Arg Cys Asn Glu Cys Gly Lys Ala Phe Asn Glu Ser Ser Ser
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195 200 205
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210 215 220
Gln Arg Met His Ser Gly Glu Lys Arg Phe Ile Cys Ser Glu Cys Gly
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<212> PRT
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Leu Ser Ala Phe Gly Phe Leu Lys Arg Phe Val Ser Glu Glu Ser Val
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<212> PRT
<213> Homo sapiens

<400> 18804

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260 265 270
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Lys His Asp Ala Lys Met Arg Tyr Leu Ser Asp Asp Val Asp Asp Ile
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Ser Leu Ser Ser Leu Ser Ser Ser Asp Lys Asn Asp Leu Ser Glu Asp
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515 520 525
Val Asp Leu Pro Glu Asp Ala Pro Leu Glu Asn Val Glu Cys Asp Asn
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Gly Phe Trp Lys Arg Pro Pro Gln Arg Trp Ser Gly Gln Glu His Tyr
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His Leu Ser His Pro Asp His Tyr His His His Gly Lys Ser Asp Leu
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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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 65                  70                  75                  80
Gln Lys Ser Val Ser Ser His Thr Glu Ser Gln Ile Asn Lys Glu Ser
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Lys Lys Asn Ala Thr Gln Leu Asp His Leu Ile Pro Gly Leu Ala His
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Asp Cys Met Ala Ser Pro Leu Ala Thr Ser Thr Thr Ala Asp Ile Gln
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Glu Ala Gly Leu Ser Pro Gln Ser Leu Gln Thr Ser Gly His His Arg
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Met Lys Thr Pro Phe Ser Thr Glu Leu Ser Leu Leu Gln Pro Asp Thr
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Pro Asp Cys Ala Gly Asp Ser His Thr Pro Leu Ala Phe Ser Phe Thr
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Glu Asp Leu Glu Ser Ser Cys Leu Leu Asp Arg Lys Glu Glu Lys Gly
            180                 185                 190
Asp Ser Ala Arg Lys Trp Glu Trp Leu His Glu Ser Lys Lys Asn Tyr
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Gln Ser Met Glu Lys His Thr Lys Leu Pro Gly Asp Lys Cys Cys Gln
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<213> Homo sapiens

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<211> 1556
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (314)..(1402)

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ggggtaggag aaagagacgc aaacacaaaa gtggaaaaca gttaatgacc agccacggcg 240
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ctttaacaaa tccattgtgg ctcgcctgtt ctcagatgct cggaggcttc ttttatacag 660
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<212> PRT
<213> Homo sapiens

US 2006/0269960

0950250.0002800

<400> 18809

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         35                  40                  45
Tyr Glu Gln His Glu Cys His Phe Pro Asn Lys Ala Met Pro Ser Ala
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Gly Thr Leu Pro Trp Val Gln Gly Ile Ile Cys Asn Ala Asn Asn Pro
 65                  70                  75                  80
Cys Phe Arg Tyr Pro Thr Pro Gly Glu Ala Pro Gly Val Val Gly Asn
                 85                  90                  95
Phe Asn Lys Ser Ile Val Ala Arg Leu Phe Ser Asp Ala Arg Arg Leu
            100                 105                 110
Leu Leu Tyr Ser Gln Lys Asp Thr Ser Met Lys Asp Met Arg Lys Val
        115                 120                 125
Leu Arg Thr Leu Gln Gln Ile Lys Lys Ser Ser Ser Asn Leu Lys Leu
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Gln Asp Phe Leu Val Asp Asn Glu Thr Phe Ser Gly Phe Leu Tyr His
145                 150                 155                 160
Asn Leu Ser Leu Pro Lys Ser Thr Val Asp Lys Met Leu Arg Ala Asp
                165                 170                 175
Val Ile Leu His Lys Val Phe Leu Gln Gly Tyr Gln Leu His Leu Thr
            180                 185                 190
Ser Leu Cys Asn Gly Ser Lys Ser Glu Glu Met Ile Gln Leu Gly Asp
        195                 200                 205
Gln Glu Val Ser Glu Leu Cys Gly Leu Pro Lys Glu Lys Leu Ala Ala
    210                 215                 220
Ala Glu Arg Val Leu Arg Ser Asn Met Asp Ile Leu Lys Pro Ile Leu
225                 230                 235                 240
Met Asp Val Ala Cys Asp Asp Ile Ala His Gly Gln Leu Thr Val Pro
                245                 250                 255
Arg Ser Ala Ala Val Ala Ala Thr Gly Asp Ala Lys Pro Asn Met Met
            260                 265                 270
Gly Arg Glu Thr Leu Leu Ser Ile Cys Ala Ser Val Pro Lys Val Glu
        275                 280                 285
Phe His Glu Arg His Ile Leu Glu His Phe Ser Phe Cys Val Cys Val
    290                 295                 300
Ser Val Ser Leu Phe Pro Ala Lys Gly Ile Val Ser Phe Ser Trp Ala
305                 310                 315                 320
Ser Phe Arg Ile Trp Val Leu Trp Lys Ala Val Phe Trp Gln His Gly
                325                 330                 335
Glu Ser Met Ala Val Trp Glu Gly Gln Leu Gly Leu Gly Leu Asn Ile
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<212> DNA
<213> Homo sapiens

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<222> (233)..(1087)

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ccgagtccct gggggtggtt tgctgtgact gcatgcggcg cgcagcgggt atatgtgcag 240
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cagcattcgg tactttgaga ttaccgacga gccgcctttc gtgcactacc tgaacacgtt 600
cagcagcaaa gagccgcagc ggggcatggg tttcatgccc aaaaggggac tggatgtcag 660
caagtgtgag atcgcccggt tctacaagct acacgaaaga aagtgtgaac ctatcatcat 720
gactgtgccc cgcaagtcag acctcttcca ggacgatctg tacccggata cgccaggccc 780
ggagccggcc ctagaagcgg acgaatggct atccggccag gacgccgaac ccgtgctcat 840
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<211> 285
<212> PRT

<213> Homo sapiens

<400> 18811

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            20                  25                  30
Gly Phe Gly Lys Ala Arg Lys Arg Lys Gly Ala Ser Gly Gly Pro Glu
        35                  40                  45
Val Ala Arg Glu Gly Gly Ala Gly Leu Val Thr Pro Pro Val Leu Gly
    50                  55                  60
Gln Asn Asn Phe Glu Glu Pro Val Ala Leu Gln Glu Met Asp Thr Ser
65                  70                  75                  80
Asn Gly Val Leu Leu Pro Phe Tyr Asp Pro Asp Ser Ser Ile Val Tyr
                85                  90                  95
Leu Cys Gly Lys Gly Asp Ser Ser Ile Arg Tyr Phe Glu Ile Thr Asp
            100                 105                 110
Glu Pro Pro Phe Val His Tyr Leu Asn Thr Phe Ser Ser Lys Glu Pro
        115                 120                 125
Gln Arg Gly Met Gly Phe Met Pro Lys Arg Gly Leu Asp Val Ser Lys
    130                 135                 140
Cys Glu Ile Ala Arg Phe Tyr Lys Leu His Glu Arg Lys Cys Glu Pro
145                 150                 155                 160
Ile Ile Met Thr Val Pro Arg Lys Ser Asp Leu Phe Gln Asp Asp Leu
                165                 170                 175
Tyr Pro Asp Thr Pro Gly Pro Glu Pro Ala Leu Glu Ala Asp Glu Trp
            180                 185                 190
Leu Ser Gly Gln Asp Ala Glu Pro Val Leu Ile Ser Leu Arg Asp Gly
        195                 200                 205
Tyr Val Pro Pro Lys His Arg Glu Leu Arg Val Thr Lys Arg Asn Ile
    210                 215                 220
Leu Asp Val Arg Pro Pro Ser Gly Pro Arg Arg Ser Gln Ser Ala Ser
225                 230                 235                 240
Asp Ala Pro Leu Ser Gln His Thr Leu Glu Thr Leu Leu Glu Glu Ile
                245                 250                 255
Lys Ala Leu Arg Glu Arg Val Gln Ala Gln Glu Gln Arg Ile Thr Ala
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<213> Homo sapiens

<220>
<221> CDS

0602456.0-US2008

<222> (70)..(1857)

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<211> 596
<212> PRT
<213> Homo sapiens

<400> 18813

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Met Ile Lys Arg Arg Glu Lys Ser Lys Arg Glu Leu Leu His Leu Thr
        35                  40                  45
Leu Glu Ile Met Glu Lys Arg Tyr Asn Leu Gly Asp Tyr Asn Gly Glu
    50                  55                  60
Ile Met Ser Glu Val Met Ala Gln Arg Gln Pro Met Lys Pro Thr Tyr
65                  70                  75                  80
Ala Ile Pro Ile Ile Pro Ile Thr Asn Ser Ser Gln Phe Lys His Gln
                85                  90                  95
Glu Ala Met Asp Val Lys Glu Phe Lys Val Asn Lys Gln Asp Lys Ala
            100                 105                 110
Asp Leu Ile Arg Pro Lys Arg Lys Tyr Glu Lys Lys Pro Lys Val Leu
        115                 120                 125
Pro Ser Ser Ala Ala Ala Thr Pro Gln Gln Thr Ser Pro Ala Ala Leu
    130                 135                 140
Pro Val Phe Asn Ala Lys Asp Leu Asn Gln Tyr Asp Phe Pro Ser Ser
145                 150                 155                 160
Asp Glu Glu Pro Leu Ser Gln Val Leu Ser Gly Ser Ser Glu Ala Glu
                165                 170                 175
Glu Asp Asn Asp Pro Asp Gly Pro Phe Ala Phe Arg Arg Lys Ala Gly
            180                 185                 190
Cys Gln Tyr Tyr Ala Pro His Leu Asp Gln Thr Gly Asn Trp Pro Trp
        195                 200                 205
Thr Ser Pro Lys Asp Gly Gly Leu Gly Asp Val Arg Tyr Arg Tyr Cys
    210                 215                 220
Leu Thr Thr Leu Thr Val Pro Gln Arg Cys Ile Gly Phe Ala Arg Arg
225                 230                 235                 240
Arg Val Gly Arg Gly Gly Arg Val Leu Leu Asp Arg Ala His Ser Asp
                245                 250                 255
Tyr Asp Ser Val Phe His His Leu Asp Leu Glu Met Leu Ser Ser Pro
            260                 265                 270
Gln His Ser Pro Val Asn Gln Phe Ala Asn Thr Ser Glu Thr Asn Thr
        275                 280                 285
Ser Asp Lys Ser Phe Ser Lys Asp Leu Ser Gln Ile Leu Val Asn Ile
    290                 295                 300
Lys Ser Cys Arg Trp Arg His Phe Arg Pro Arg Thr Pro Ser Leu His
305                 310                 315                 320
Asp Ser Asp Asn Asp Glu Leu Ser Cys Arg Lys Leu Tyr Arg Ser Ile
                325                 330                 335
Asn Arg Thr Gly Thr Ala Gln Pro Gly Thr Gln Thr Cys Ser Thr Ser
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0050450 - 0050800

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    370                 375                 380
Gln Leu Ala Gln Ile Gln Gln Gln Gln Ala Asn Ser Asn Ser Ser Thr
385                 390                 395                 400
Asn Thr Ser Gln Gly Phe Val Ser Lys Thr Leu Asp Ser Ala Ser Ala
                405                 410                 415
Gln Phe Ala Ala Ser Ala Leu Val Thr Ser Glu Gln Leu Met Gly Phe
            420                 425                 430
Lys Met Lys Asp Asp Val Val Leu Gly Ile Gly Val Asn Gly Val Leu
        435                 440                 445
Pro Ala Ser Gly Val Tyr Lys Gly Leu His Leu Ser Ser Thr Thr Pro
    450                 455                 460
Thr Ala Leu Val His Thr Ser Pro Ser Thr Ala Gly Ser Ala Leu Leu
465                 470                 475                 480
Gln Pro Ser Asn Ile Thr Gln Thr Ser Ser Ser His Ser Ala Leu Ser
                485                 490                 495
His Gln Val Thr Ala Ala Asn Ser Ala Thr Thr Gln Val Leu Ile Gly
            500                 505                 510
Asn Asn Ile Arg Leu Thr Val Pro Ser Ser Val Ala Thr Val Asn Ser
        515                 520                 525
Ile Ala Pro Ile Asn Ala Arg His Ile Pro Arg Thr Leu Ser Ala Val
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Pro Ser Ser Ala Leu Lys Leu Ala Ala Ala Ala Asn Cys Gln Val Ser
545                 550                 555                 560
Lys Val Pro Ser Ser Ser Ser Val Asp Ser Val Pro Arg Glu Asn His
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Met Glu Val Thr
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<212> DNA
<213> Homo sapiens

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<222> (714)..(2483)

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ctaaatcttt ggaaacttct tcagcacttt caccgtctct aaaaaataag tcaaagggga 2100
tacagtcgat tttgaaagta ccacagccag ttcccctcat agctcagaag ccagttggtg 2160
aaatgaagaa ttcgtgcaat gttcttcatc ctcagtctcc gaataattcc aacaggcaag 2220
gttgcaaagt tccatttggt gaaagcaaat attttccatc ttcctctcca gtaaacattc 2280
ttttgtcatc acagtctgtc tctgacacct tcgttaaaga ggtcttaaaa tggaaatatg 2340
aaatgttttt gaactttggt cagtgtgggc cccctgcaag tctttgtcag tccatctcaa 2400
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tggtattgaa tacttttgaa acagt 2485

<210> 18815
<211> 590
<212> PRT
<213> Homo sapiens

<400> 18815
Met Ala Glu Asp Pro Val Arg Pro Ser Ser Ser Val Arg Asn Glu Gly

0052680.0052800

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Gln Ser Asp Thr Asn Lys Arg Asp Leu Val Gly Asn Asp Phe Lys Ser
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Ile Asp Arg Arg Thr Ser Thr Pro Asn Ser Arg Ile Gln Arg Ala Thr
        35                  40                  45
Thr Val Ser Gln Lys Lys Ser Ser Lys Leu Cys Thr Cys Thr Glu Pro
    50                  55                  60
Ile Arg Lys Val Pro Val Ser Lys Thr Pro Lys Lys Thr His Ser Asp
65                  70                  75                  80
Ala Lys Lys Gly Gln Asn Arg Ser Ser Asn Tyr Leu Ser Cys Arg Thr
                85                  90                  95
Thr Pro Ala Ile Val Pro Pro Lys Lys Phe Arg Gln Cys Pro Glu Pro
            100                 105                 110
Thr Ser Thr Ala Glu Lys Leu Gly Leu Lys Lys Gly Pro Arg Lys Ala
        115                 120                 125
Tyr Glu Leu Ser Gln Arg Ser Leu Asp Tyr Val Ala Gln Leu Arg Asp
    130                 135                 140
His Gly Lys Thr Val Gly Val Val Asp Thr Arg Lys Lys Thr Lys Leu
145                 150                 155                 160
Ile Ser Pro Gln Asn Leu Ser Val Arg Asn Asn Lys Lys Leu Leu Thr
                165                 170                 175
Ser Gln Glu Leu Gln Met Gln Arg Gln Ile Arg Pro Lys Ser Gln Lys
            180                 185                 190
Asn Arg Arg Arg Leu Ser Asp Cys Glu Ser Thr Asp Val Lys Arg Ala
        195                 200                 205
Gly Ser His Thr Ala Gln Asn Ser Asp Ile Phe Val Pro Glu Ser Asp
    210                 215                 220
Arg Ser Asp Tyr Asn Cys Thr Gly Gly Thr Glu Val Leu Ala Asn Ser
225                 230                 235                 240
Asn Arg Lys Gln Leu Ile Lys Cys Met Pro Ser Glu Pro Glu Thr Ile
                245                 250                 255
Lys Ala Lys His Gly Ser Pro Ala Thr Asp Asp Ala Cys Pro Leu Asn
            260                 265                 270
Gln Cys Asp Ser Val Val Leu Asn Gly Thr Val Pro Thr Asn Glu Val
        275                 280                 285
Ile Val Ser Thr Ser Glu Asp Pro Leu Gly Gly Gly Asp Pro Thr Ala
    290                 295                 300
Arg His Ile Glu Met Ala Ala Leu Lys Glu Gly Glu Pro Asp Ser Ser
305                 310                 315                 320
Ser Asp Ala Glu Glu Asp Asn Leu Phe Leu Thr Gln Asn Asp Pro Glu
                325                 330                 335
Asp Met Asp Leu Cys Ser Gln Met Glu Asn Asp Asn Tyr Lys Leu Ile
            340                 345                 350
Glu Leu Ile His Gly Lys Asp Thr Val Glu Val Glu Glu Asp Ser Val
        355                 360                 365
Ser Arg Pro Gln Leu Glu Ser Leu Ser Gly Thr Lys Cys Lys Tyr Lys
    370                 375                 380
Asp Cys Leu Glu Thr Thr Lys Asn Gln Gly Glu Tyr Cys Pro Lys His
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385                 390                 395                 400
Ser Glu Val Lys Ala Ala Asp Glu Asp Val Phe Arg Lys Pro Gly Leu
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Pro Pro Pro Ala Ser Lys Pro Leu Arg Pro Thr Thr Lys Ile Phe Ser
            420                 425                 430
Ser Lys Ser Thr Ser Arg Ile Ala Gly Leu Ser Lys Ser Leu Glu Thr
        435                 440                 445
Ser Ser Ala Leu Ser Pro Ser Leu Lys Asn Lys Ser Lys Gly Ile Gln
    450                 455                 460
Ser Ile Leu Lys Val Pro Gln Pro Val Pro Leu Ile Ala Gln Lys Pro
465                 470                 475                 480
Val Gly Glu Met Lys Asn Ser Cys Asn Val Leu His Pro Gln Ser Pro
                485                 490                 495
Asn Asn Ser Asn Arg Gln Gly Cys Lys Val Pro Phe Gly Glu Ser Lys
            500                 505                 510
Tyr Phe Pro Ser Ser Ser Pro Val Asn Ile Leu Leu Ser Ser Gln Ser
        515                 520                 525
Val Ser Asp Thr Phe Val Lys Glu Val Leu Lys Trp Lys Tyr Glu Met
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Phe Leu Asn Phe Gly Gln Cys Gly Pro Pro Ala Ser Leu Cys Gln Ser
545                 550                 555                 560
Ile Ser Arg Pro Val Pro Val Arg Phe His Asn Tyr Gly Asp Tyr Phe
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Asn Val Phe Phe Pro Leu Met Val Leu Asn Thr Phe Glu Thr
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<210> 18816
<211> 2166
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (502)..(1329)

<400> 18816
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agtgacactc ctcctaagat ttatcatgat taaggagcat gggctccagg acccctaact 180
ccacctgaca tagaacagtt agactctcag aataatgtca ttaattatac cgctccattg 240
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caagctcaca catggttgag tcactatggg aaaatcatgt acttattaag tcttggttat 360
attaatgtaa ccggtgtgct aaccaaccat tcctggccca atcgccttca ttgtgctgac 420
tatacagaat ggattccctt caatagttcc tacccccctc catagaccca gtgtcttggc 480
ccactggcta gaaaacaatc tatgttaact ggagacattg tggattgggg acctaaaggc 540
caattagatg gaaaagaaga aaatcagaaa tcgtggcaca aactttgctg gcattggtgg 600
caagctttta atgcttcttc tttatataac actgggatcc aatcccagtc ggccgcccag 660

attgcttggc atggagcagg ctttagcccg cctcttcctc agtggcatta tctagggagg 720
aaaggaccaa ttcaaaagat gatatggaag gcagcattcc catttatgaa tggcaacatc 780
tgggttgcca taatactatc caataatagc aatagtaagc aacacagtct taatgttaca 840
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cagtaattgt gttgtcattt taatcacact catatttgtg taaccaactt agaatataac 1440
caaagtgagt atccatggga tcttgtgaaa gcccatttgc agggagcttt cacatccgac 1500
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gagtttcagc cttctttaga agactggact gaattccagc aaggcctgga gagcgtcaac 1620
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gttgggagcc aaaaaggcca aagggatggt gaccaactca gcattccact ggaggctaca 1860
tgatcaaaca gcaaactgtt tatcatgaat acagaatgtg ggcaaactcg cttctgtgcc 1920
tgcccagaag gtttgctgag ggccatcgct ccctggcccc ggctccttga ggttatctac 1980
tgggacatct agagcctatt gttcgaggaa tgcagtcttg caagcctact ctggaccgag 2040
cagctgacct cttcttccac acccccttctc actatctctt ttgcctaata aatatggagg 2100
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<210> 18817
<211> 276
<212> PRT
<213> Homo sapiens

<400> 18817
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Gly Lys Glu Glu Asn Gln Lys Ser Trp His Lys Leu Cys Trp His Trp
20 25 30
Trp Gln Ala Phe Asn Ala Ser Ser Leu Tyr Asn Thr Gly Ile Gln Ser
35 40 45
Gln Ser Ala Ala Gln Ile Ala Trp His Gly Ala Gly Phe Ser Pro Pro
50 55 60
Leu Pro Gln Trp His Tyr Leu Gly Arg Lys Gly Pro Ile Gln Lys Met
65 70 75 80
Ile Trp Lys Ala Ala Phe Pro Phe Met Asn Gly Asn Ile Trp Val Ala
85 90 95
Ile Ile Leu Ser Asn Asn Ser Asn Ser Lys Gln His Ser Leu Asn Val
100 105 110

0 9 5 0 2 9 4 5 6 9 . 0 2 / 2 0 0 0 0

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Thr Phe Val Lys Asn Ile Thr Thr Gln Phe Thr Val Cys Val Phe Asn
        115                 120                 125
Pro Tyr Val Phe Leu Ala Ala Lys Lys Asp Gln Leu Gln Val Asn Asn
    130                 135                 140
Thr Gln Leu Thr Cys Lys Ser Cys Gln Leu Tyr His Cys Ile Asn His
145                 150                 155                 160
Ser Thr Leu Gln Thr His Asn Ile Ser Thr Leu Met Ile Leu Gly Cys
                165                 170                 175
Ile Pro Gly Leu Trp Ile Pro Val Asn Leu Ser Glu Pro Trp Ala Ala
            180                 185                 190
Thr Ile Ala Leu His Phe Val Lys Leu Leu Leu Thr Gln Phe Thr His
        195                 200                 205
Cys Val Arg Arg Gly Leu Gly Met Ile Ile Phe Ala Ile Val Tyr Leu
    210                 215                 220
Val Thr Leu Ile Ile Ser Val Val Met Ser Ser Val Ala Leu His Ser
225                 230                 235                 240
Ser Ile Gln Thr Ala Gln Tyr Val Glu Asn Trp Thr Arg Thr Val Asn
                245                 250                 255
Gln Gly Trp Leu Leu Glu Asn Lys Ile Asn Thr Glu Leu Gln Thr Glu
            260                 265                 270
Val Ala Val Leu
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<210> 18818
<211> 2326
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (408)..(2324)

<400> 18818

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aaggtctaca tgattacctg aagtttaata ataatgcaag aagtgtttgt gggaagcaga 180
gaagcaagca actgtatttc ttgttctcac ctaagcatta ctggaggata agccacatca 240
gtctacaaag aggttttcat acaaacataa taagatgtaa atggaccaaa agtgaagcac 300
attcttgcag taagcactgt tactctccga gcaaccatgg tttacatatt gggattttga 360
aacttagcac ttctgctccc aagggactta caaaagtgaa catttgtatg tcccgtatta 420
aaagtacttt gaactctgtt tcaaaggctg tttttggcaa tcaaaatgaa atgatttcac 480
gtttagctca atttaagcca agttcccaaa ttttaagaaa agtatcggat agtggctggt 540
taaaacagaa aaacatcaaa caagccatca aatctctgaa aaaatatagt gacaaatcag 600
cagaaaagag tccttttcca gaagagaaaa gtcacattat agacaaagaa gaagatatag 660
gtaaacgcag tcttttttcat tacacaagtt ctataaccac aaaatttgga gactcattct 720
acttttttatc aaatcatatt aattcatatt tcaaacgtaa ggaaaaaatg tctcaacaaa 780
aggaaaatga acatttccgg gacaaatcag aacttgaaga taaaaaggta gaagagggga 840
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cggtggacaa gcctacaagt ccttctgcga tacctgatgt tcttcaagtt tcaactaaac 960
aaagtattgc taactttctt tctcgtccca cggaaggtgt acaagcttta gtaggtggtt 1020
atattggtgg acttgtcccc aaattaaagt atgattcaaa gagtcagtca gaagaacagg 1080
aagagcctgc taaaactgat caggctgtca gcaaagacag aaatgcagag gagaaaaagc 1140
gtttatctct tcagcgagaa aagattatcg caagggtgag tattgataac aggacccggg 1200
cattagttca ggcattaaga agaacaactg acccaaagct ctgcattact agggttgaag 1260
aactgacttt tcatcttcta gaatttcctg aaggaaaagg agtggctgtc aaggaaagaa 1320
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cctattttag attcaatcct gtaatgtgtg aaaacatacc tctagatgaa agtcgaaatg 2280
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0606460-070800

<210> 18819
<211> 639
<212> PRT
<213> Homo sapiens

<400> 18819
Met Ser Arg Ile Lys Ser Thr Leu Asn Ser Val Ser Lys Ala Val Phe
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20 25 30
Ser Gln Ile Leu Arg Lys Val Ser Asp Ser Gly Trp Leu Lys Gln Lys
35 40 45
Asn Ile Lys Gln Ala Ile Lys Ser Leu Lys Lys Tyr Ser Asp Lys Ser
50 55 60
Ala Glu Lys Ser Pro Phe Pro Glu Glu Lys Ser His Ile Ile Asp Lys
65 70 75 80
Glu Glu Asp Ile Gly Lys Arg Ser Leu Phe His Tyr Thr Ser Ser Ile
85 90 95
Thr Thr Lys Phe Gly Asp Ser Phe Tyr Phe Leu Ser Asn His Ile Asn
100 105 110
Ser Tyr Phe Lys Arg Lys Glu Lys Met Ser Gln Gln Lys Glu Asn Glu

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        115                 120                 125
His Phe Arg Asp Lys Ser Glu Leu Glu Asp Lys Lys Val Glu Glu Gly
    130                 135                 140
Lys Leu Arg Ser Pro Asp Pro Gly Ile Leu Ala Tyr Lys Pro Gly Ser
145                 150                 155                 160
Glu Ser Val His Thr Val Asp Lys Pro Thr Ser Pro Ser Ala Ile Pro
                165                 170                 175
Asp Val Leu Gln Val Ser Thr Lys Gln Ser Ile Ala Asn Phe Leu Ser
            180                 185                 190
Arg Pro Thr Glu Gly Val Gln Ala Leu Val Gly Gly Tyr Ile Gly Gly
        195                 200                 205
Leu Val Pro Lys Leu Lys Tyr Asp Ser Lys Ser Gln Ser Glu Glu Gln
    210                 215                 220
Glu Glu Pro Ala Lys Thr Asp Gln Ala Val Ser Lys Asp Arg Asn Ala
225                 230                 235                 240
Glu Glu Lys Lys Arg Leu Ser Leu Gln Arg Glu Lys Ile Ile Ala Arg
                245                 250                 255
Val Ser Ile Asp Asn Arg Thr Arg Ala Leu Val Gln Ala Leu Arg Arg
            260                 265                 270
Thr Thr Asp Pro Lys Leu Cys Ile Thr Arg Val Glu Glu Leu Thr Phe
        275                 280                 285
His Leu Leu Glu Phe Pro Glu Gly Lys Gly Val Ala Val Lys Glu Arg
    290                 295                 300
Ile Ile Pro Tyr Leu Leu Arg Leu Arg Gln Ile Lys Asp Glu Thr Leu
305                 310                 315                 320
Gln Ala Ala Val Arg Glu Ile Leu Ala Leu Ile Gly Tyr Val Asp Pro
                325                 330                 335
Val Lys Gly Arg Gly Ile Arg Ile Leu Ser Ile Asp Gly Gly Gly Thr
            340                 345                 350
Arg Gly Val Val Ala Leu Gln Thr Leu Arg Lys Leu Val Glu Leu Thr
        355                 360                 365
Gln Lys Pro Val His Gln Leu Phe Asp Tyr Ile Cys Gly Val Ser Thr
    370                 375                 380
Gly Ala Ile Leu Ala Phe Met Leu Gly Leu Phe His Met Pro Leu Asp
385                 390                 395                 400
Glu Cys Glu Glu Leu Tyr Arg Lys Leu Gly Ser Asp Val Phe Ser Gln
                405                 410                 415
Asn Val Ile Val Gly Thr Val Lys Met Ser Trp Ser His Ala Phe Tyr
            420                 425                 430
Asp Ser Gln Thr Trp Glu Asn Ile Leu Lys Asp Arg Met Gly Ser Ala
        435                 440                 445
Leu Met Ile Glu Thr Ala Arg Asn Pro Thr Cys Pro Lys Val Ala Ala
    450                 455                 460
Val Ser Thr Ile Val Asn Arg Gly Ile Thr Pro Lys Ala Phe Val Phe
465                 470                 475                 480
Arg Asn Tyr Gly His Phe Pro Gly Ile Asn Ser His Tyr Leu Gly Gly
                485                 490                 495
Cys Gln Tyr Lys Met Trp Gln Ala Ile Arg Ala Ser Ser Ala Ala Pro
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0950450 - 0950800

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            500                 505                 510
Gly Tyr Phe Ala Glu Tyr Ala Leu Gly Asn Asp Leu His Gln Asp Gly
        515                 520                 525
Gly Leu Leu Leu Asn Asn Pro Ser Ala Leu Ala Met His Glu Cys Lys
    530                 535                 540
Cys Leu Trp Pro Asp Val Pro Leu Glu Cys Ile Val Ser Leu Gly Thr
545                 550                 555                 560
Gly Arg Tyr Glu Ser Asp Val Arg Asn Thr Val Thr Tyr Thr Ser Leu
                565                 570                 575
Lys Thr Lys Leu Ser Asn Val Ile Asn Ser Ala Thr Asp Thr Glu Glu
            580                 585                 590
Val His Ile Met Leu Asp Gly Leu Leu Pro Pro Asp Thr Tyr Phe Arg
        595                 600                 605
Phe Asn Pro Val Met Cys Glu Asn Ile Pro Leu Asp Glu Ser Arg Asn
    610                 615                 620
Glu Lys Leu Asp Gln Leu Gln Leu Glu Gly Leu Lys Tyr Ile Glu
625                 630                 635
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<210> 18820
<211> 2362
<212> DNA
<213> Homo sapiens

<400> 18820

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atgtggaaat gcattgtctt tcttctttcc taggccagtg gtcctcaaac ttgagcaggt 780
ttaagcatgg tcatagcaga atcaatgtgc tcaccccatc atgaaaaaaa aaatgtgtta 840
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0950450.0N5800

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gaataaacaa cctggaaaaa ac 2362

<210> 18821
<211> 2768
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1419)..(2555)

<400> 18821
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cctaggggct ccctgagcca gggctgtgac accctctttg gggctctgcg gtttctggta 180
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agccgcttgt ggttcatcag atccagctgc agacttgcat agaaccggcg cctttgccgg 300
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gctggaaaag caacacctga aggatcccgt gacacaatca acctgctagg agatccctgc 600
caccctgaga ggctgcagga agctgcctcc atccaggcct cttcacagaa ggagaattgc 660
agagaccgta ggatttttct actcacagga acagatggtg tccggtcagg aaggtaaaat 720
gcttcaagaa aagtgcaata gggattataa tactgatgat ctgagactct gataatgact 780
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<211> 379
<212> PRT
<213> Homo sapiens

<400> 18822

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Pro	Leu	Gly	Ser	Glu	Pro	Glu	Leu	Arg	Glu	Lys	Tyr	Leu	Thr	Val	Gln
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<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (79)..(696)

<400> 18823

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<212> PRT

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<213> Homo sapiens

<400> 18824

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Pro Gly His Leu Asn Gln Gly Thr Phe Ile Trp Gly Phe Gln Gly Gly
    50                  55                  60
Asn Thr Asn Trp Lys Pro Pro Leu Asn Cys Lys Ile Tyr Asn Tyr Leu
65                  70                  75                  80
Asn Arg Ile Gly Cys Phe Phe Leu His Pro Arg Cys Ser Lys Arg Lys
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Asp Ala Ala Asp Phe Ala Ile Cys Met His Ala Gly Arg Leu Asp Glu
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Gln Leu Pro Lys Gln Ile Pro Phe Thr Ile Leu Ser Gly Asp Gln Gly
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Phe Leu Glu Leu Glu Asn Gln Phe Lys Lys Thr Gln Arg Pro Ala His
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Ile Leu Asn Pro His His Leu Glu Gly Asp Met Met Cys Ala Leu Leu
145                 150                 155                 160
Asn Ser Ile Ser Asp Thr Thr Lys Glu Cys Asp Ser Asp Asp Asn Met
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<222> (715)..(1680)

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<210> 18826
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<212> PRT
<213> Homo sapiens

<400> 18826
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Gly Ala Ala Asp Lys Ser Ala Val Val Ala Ala Ala Ala Pro Ala Ser
35 40 45
Val Ala Asp Asp Thr Pro Pro Pro Glu Arg Arg Asn Lys Ser Gly Ile
50 55 60
Ile Ser Glu Pro Leu Asn Lys Ser Leu Arg Arg Ser Arg Pro Leu Ser
65 70 75 80
His Tyr Ser Ser Phe Gly Ser Ser Gly Gly Ser Gly Gly Gly Ser Met
85 90 95
Met Gly Gly Glu Ser Ala Asp Lys Ala Thr Ala Ala Ala Ala Ala Ala
100 105 110
Ser Leu Leu Ala Asn Gly His Asp Leu Ala Ala Ala Met Ala Val Asp

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Leu Ser Lys Ala Glu Arg Ala Thr Glu Leu Ala Ala Glu Gly Gln Leu
145                 150                 155                 160
Thr Leu Gln Gln Phe Ala Gln Ser Thr Glu Met Leu Lys Arg Val Val
                165                 170                 175
Gln Glu His Leu Pro Leu Met Ser Glu Ala Gly Ala Gly Leu Pro Asp
            180                 185                 190
Met Glu Ala Val Ala Gly Ala Glu Ala Leu Asn Gly Gln Ser Asp Phe
        195                 200                 205
Pro Tyr Leu Gly Ala Phe Pro Ile Asn Pro Gly Leu Phe Ile Met Thr
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Pro Ala Gly Val Phe Leu Ala Glu Ser Ala Leu His Met Ala Gly Leu
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Ala Glu Tyr Pro Met Gln Gly Glu Leu Ala Ser Ala Ile Ser Ser Gly
                245                 250                 255
Lys Lys Lys Arg Lys Arg Cys Gly Met Cys Ala Pro Cys Arg Arg Arg
            260                 265                 270
Ile Asn Cys Glu Gln Cys Ser Ser Cys Arg Asn Arg Lys Thr Gly His
        275                 280                 285
Gln Ile Cys Lys Phe Arg Lys Cys Glu Glu Leu Lys Lys Lys Pro Ser
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<211> 2142
<212> DNA
<213> Homo sapiens

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<400> 18827
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<211> 110
<212> PRT
<213> Homo sapiens

<400> 18828
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Val Tyr Leu Leu Leu Leu Phe Phe Glu Thr Glu Ser His Cys Leu Ala
35 40 45
Gln Ala Gly Val Gln Trp Pro Glu Leu Ser Ser Pro Gln Pro Pro Pro
50 55 60
Pro Gly Phe Lys Gln Phe Ser Cys Leu Ser Leu Ser Ser Ser Trp Asp
65 70 75 80
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<210> 18829
<211> 2319
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (443)..(2317)

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<211> 625
<212> PRT
<213> Homo sapiens

<400> 18830
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35 40 45
Tyr Gly Gly Asp Tyr Asp Ser Phe Ala Asp Val Val Gln Lys Phe Phe
50 55 60
Glu Ser Leu Phe Ala Cys Asn Ile Cys Pro Tyr Val Val Leu Asp Gly
65 70 75 80
Gly Cys Asp Ile Ser Asp Lys Lys Leu Thr Thr Leu Lys Asp Arg Ala
85 90 95
Arg Glu Lys Ile Gln Met Ala His Ser Leu Ser Val Gly Gly Ser Gly
100 105 110
Tyr Val Cys Pro Leu Leu Ile Arg Glu Val Phe Ile Gln Val Leu Ile
115 120 125
Lys Leu Arg Val Cys Phe Val Gln Cys Phe Ser Glu Ala Asp Arg Asp
130 135 140
Ile Met Thr Leu Ala Asn His Trp Asn Cys Pro Val Leu Ser Ser Asp
145 150 155 160
Ser Asp Phe Cys Ile Phe Asp Leu Lys Thr Gly Phe Cys Pro Leu Asn
165 170 175
Ser Phe Gln Trp Arg Asn Met Asn Thr Ile Lys Gly Thr Gln Asn Tyr
180 185 190
Ile Pro Ala Lys Cys Phe Ser Leu Asp Ala Phe Cys His His Phe Ser
195 200 205
Asn Met Asn Lys Ala Leu Leu Pro Leu Phe Ala Val Leu Cys Gly Asn
210 215 220
Asp His Val Asn Leu Pro Ile Met Glu Thr Phe Leu Ser Lys Ala Arg
225 230 235 240
Leu Pro Leu Gly Ala Thr Ser Ser Lys Gly Arg Arg His His Arg Ile
245 250 255
Leu Gly Leu Leu Asn Trp Leu Ser His Phe Ala Asn Pro Thr Glu Ala
260 265 270
Leu Asp Asn Val Leu Lys Tyr Leu Pro Lys Lys Asp Arg Glu Asn Val
275 280 285

EP 2 090 656 A2 20090819

Lys Glu Leu Leu Cys Cys Ser Met Glu Glu Tyr Gln Gln Ser Gln Val
290 295 300
Lys Leu Gln Asp Phe Phe Gln Cys Gly Thr Tyr Val Cys Pro Asp Ala
305 310 315 320
Leu Asn Leu Gly Leu Pro Glu Trp Val Leu Val Ala Leu Ala Lys Gly
325 330 335
Gln Leu Ser Pro Phe Ile Ser Asp Ala Leu Val Leu Arg Arg Thr Ile
340 345 350
Leu Pro Thr Gln Val Glu Asn Met Gln Gln Pro Asn Ala His Arg Ile
355 360 365
Ser Gln Pro Ile Arg Gln Ile Ile Tyr Gly Leu Leu Leu Asn Ala Ser
370 375 380
Pro His Leu Asp Lys Thr Ser Trp Asn Ala Leu Pro Pro Gln Pro Leu
385 390 395 400
Ala Phe Ser Glu Val Glu Arg Ile Asn Lys Asn Ile Arg Thr Ser Ile
405 410 415
Ile Asp Ala Val Glu Leu Ala Lys Asp His Ser Asp Leu Ser Arg Leu
420 425 430
Thr Glu Leu Ser Leu Arg Arg Arg Gln Met Leu Leu Leu Glu Thr Leu
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Lys Val Lys Gln Thr Ile Leu Glu Pro Ile Pro Thr Ser Leu Lys Leu
450 455 460
Pro Ile Ala Val Ser Cys Tyr Trp Leu Gln His Thr Glu Thr Lys Ala
465 470 475 480
Lys Leu His His Leu Gln Ser Leu Leu Leu Thr Met Leu Val Gly Pro
485 490 495
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500 505 510
Gly Ala Lys Met Leu Tyr Ala Glu Phe Gln Arg Val Lys Ala Gln Thr
515 520 525
Arg Leu Gly Thr Arg Leu Asp Leu Asp Thr Ala His Ile Phe Cys Gln
530 535 540
Trp Gln Ser Cys Leu Gln Met Gly Met Tyr Leu Asn Gln Leu Leu Ser
545 550 555 560
Thr Pro Leu Pro Glu Pro Asp Leu Thr Arg Leu Tyr Ser Gly Ser Leu
565 570 575
Val His Gly Leu Cys Gln Gln Leu Leu Ala Ser Thr Ser Val Glu Ser
580 585 590
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595 600 605
Asn Ala Thr Arg Ser Tyr Ala Pro Ala Glu Ile Phe Leu Pro Lys Gly
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<211> 2025

0060950-0060800

<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (41)..(1159)

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tgtcacaaca agattactga tttcccattt aagtggaatt cgtcattatg aaaaggacat 720
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<211> 373
<212> PRT
<213> Homo sapiens

0050-0050-0050

0020050-0020800

<400> 18832

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Leu Pro Pro Leu Gly His Gly Trp Val Gly Gly Leu Gly Leu Gly Leu
        35                  40                  45
Gly Leu Ala Leu Gly Val Lys Leu Ala Gly Gly Leu Ser Gly Ala Ala
    50                  55                  60
Pro Ala Gln Ser Pro Ala Ala Pro Asp Pro Glu Ala Ser Pro Leu Ala
65                  70                  75                  80
Glu Pro Pro Gln Glu Gln Ser Leu Ala Pro Trp Ser Pro Gln Thr Pro
                85                  90                  95
Ala Pro Pro Cys Ser Arg Cys Phe Ala Arg Ala Ile Glu Ser Ser Arg
            100                 105                 110
Asp Leu Leu His Arg Ile Lys Asp Glu Val Gly Ala Pro Gly Ile Val
        115                 120                 125
Val Gly Val Ser Val Asp Gly Lys Glu Val Trp Ser Glu Gly Leu Gly
    130                 135                 140
Tyr Ala Asp Val Glu Asn Arg Val Pro Cys Lys Pro Glu Thr Val Met
145                 150                 155                 160
Arg Ile Ala Ser Ile Ser Lys Ser Leu Thr Met Val Ala Leu Ala Lys
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Leu Trp Glu Ala Gly Lys Leu Asp Leu Asp Ile Pro Val Gln His Tyr
            180                 185                 190
Val Pro Glu Phe Pro Glu Lys Glu Tyr Glu Gly Glu Lys Val Ser Val
        195                 200                 205
Thr Thr Arg Leu Leu Ile Ser His Leu Ser Gly Ile Arg His Tyr Glu
    210                 215                 220
Lys Asp Ile Lys Lys Val Lys Glu Glu Lys Ala Tyr Lys Ala Leu Lys
225                 230                 235                 240
Met Met Lys Glu Asn Val Ala Phe Glu Gln Glu Lys Glu Gly Lys Ser
                245                 250                 255
Asn Glu Lys Asn Asp Phe Thr Lys Phe Lys Thr Glu Gln Glu Asn Glu
            260                 265                 270
Ala Lys Cys Arg Asn Ser Lys Pro Gly Lys Lys Lys Asn Asp Phe Glu
        275                 280                 285
Gln Gly Glu Leu Tyr Leu Arg Glu Lys Phe Glu Asn Ser Ile Glu Ser
    290                 295                 300
Leu Arg Leu Phe Lys Asn Asp Pro Leu Phe Phe Lys Pro Gly Ser Gln
305                 310                 315                 320
Phe Leu Tyr Ser Thr Phe Gly Tyr Thr Leu Leu Ala Ala Ile Val Glu
                325                 330                 335
Arg Ala Ser Gly Cys Lys Tyr Leu Asp Tyr Met Gln Lys Ile Phe His
            340                 345                 350
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Tyr Asn Arg Ala Arg
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<210> 18833
<211> 1469
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (76)..(846)

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taggcaacat ggcgaaaccc tgtctctac 1469

<210> 18834
<211> 257
<212> PRT
<213> Homo sapiens

<400> 18834
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0050.0078.0000

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            20                  25                  30
Gly Ala Pro Ser Lys Asn Ser Ser Arg Leu Gly Gly Arg Pro Cys Met
        35                  40                  45
Cys Thr Ala Gly Arg Arg Pro Asn Arg Ala Ser Gly Arg Arg Arg Arg
    50                  55                  60
Ser Cys Ser Pro Ala Pro Thr Trp Pro Pro Leu Cys Cys Tyr Pro Gln
65                  70                  75                  80
Ser Arg Pro Thr Ala Ser Ala Ala Gly Pro Gly Ala Cys Met Arg Ala
                85                  90                  95
Ser Gly Arg Pro His Gly Asn Thr Thr Ala Ser Thr Ala Pro Pro Arg
            100                 105                 110
His Pro Arg Pro Arg Arg Pro Gly Gly Pro Ala Leu Arg Pro Thr Pro
        115                 120                 125
Arg Pro Cys Ala Gly Pro Ala Pro Pro Pro Ala Ser Arg Asp Cys Arg
    130                 135                 140
Cys Arg Arg Pro Arg Arg Trp Pro Arg Ala Gly Arg Arg Gly Arg Arg
145                 150                 155                 160
Ala Gly Ala Cys Lys Pro Ser Cys Ala Gly Ala Ala Trp Ser Ala Arg
                165                 170                 175
Gly Ala Pro Leu Cys Ser Tyr Arg Thr Ser Cys Ala Gly Ser Cys Gly
            180                 185                 190
Ala Arg Thr Ala Pro Thr Pro Ala Pro Thr Cys Ala Ser Pro Ser Ala
        195                 200                 205
Ala Ala Ser Ser Cys Cys Arg Arg Arg Arg Ala Cys Ser Ser Pro Thr
    210                 215                 220
Thr Ala Trp Ser Gly Ala Cys Gly Ala Gly Pro Thr Ala Ala Thr Ala
225                 230                 235                 240
Ala Gln Pro Gly Lys Pro Arg Ser Ala Ala Ala Pro Gly Arg Ala Arg
                245                 250                 255
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<210> 18835
<211> 2303
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (442)..(819)

<400> 18835
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gatgctttta aaaagattgg aaatgcttat gctgttttaa gtaatccaga aaagcgaaaa 180

0050350 - 0050800

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<210> 18836
<211> 126
<212> PRT
<213> Homo sapiens

<400> 18836
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20 25 30

0050450.0002

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Thr Ile Lys Met Gln Thr Glu Asn Leu Gly Val Val Tyr Tyr Val Asn
          35                  40                  45
Lys Asp Phe Lys Asn Glu Tyr Lys Gly Met Leu Leu Gln Lys Val Glu
      50                  55                  60
Lys Ser Val Glu Glu Asp Tyr Val Thr Asn Ile Arg Asn Asn Cys Trp
 65                  70                  75                  80
Lys Glu Arg Gln Gln Lys Thr Asp Met Gln Tyr Ala Ala Lys Val Tyr
                 85                  90                  95
Arg Asp Asp Arg Leu Arg Arg Lys Ala Asp Ala Leu Ser Met Asp Asn
            100                 105                 110
Cys Lys Glu Leu Glu Arg Leu Thr Ser Leu Tyr Lys Gly Gly
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0960450.0760300

<210> 18837
<211> 2597
<212> DNA
<213> Homo sapiens

<400> 18837
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gatgtcttag ttagaaacca gattaataga agagtaggcc tgatatatta catcatgagc 480
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Thr His Pro Leu Ala Ser Leu Cys His Val Val Ser Ile Gly Leu Glu
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Lys Ala Thr Gly Ser Thr Ser Asp Pro Gly Asn Arg Asn Arg Ser Glu
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Lys Ser Lys Asn Thr Trp Tyr Ile Asp Glu Val Ala Glu Asp Pro Ala
145                 150                 155                 160
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<400> 18854

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Glu Met Lys Glu Pro Phe Gly Leu Glu Glu Val Asn Glu Ser Ser Cys
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Thr Leu Asp Ser Gln Val Val Gln Ala Leu Phe Glu Asp Thr Asp Ile
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Glu Lys Thr Val Val Leu Pro Gly Tyr Ser Ser Phe Leu Ile Thr Ser
            180                 185                 190
Ile Leu Asp Asn Lys Asn Ala Leu Ala Ile Ala Thr Met Pro Glu Ser
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Ala Pro Asn Asn Met Thr Phe Leu Lys Ser Thr Trp Phe Leu Tyr Asn
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Phe Gly Gln Arg Asn Gly Arg Thr Trp Lys Ile Tyr Ser Lys Pro Cys
225                 230                 235                 240
Asn Tyr Trp Phe Gln His Asp Asp Ser Pro Ser Leu Asn Ile Val Lys
                245                 250                 255
Tyr Ile Asp Leu Gly Asn Ser Tyr Val Leu Lys Ala Lys Val Ile Arg
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Asn Ala Lys Gly Phe Arg Met Leu Glu Ile Pro Leu Leu Thr Val Phe
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Asp Thr Asp Ser Tyr Val Ile Thr Ile Ser Ala Ala Ser Lys Val Leu
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His Gln Gly Ser Thr Ser Leu Ala Phe Ile Met Trp Ser Ala Ser Thr
325 330 335
Glu Cys Phe Val Thr Thr Met Val Pro Thr Leu Lys Ser Ser Cys Ser
340 345 350
Tyr Leu Arg Ser Met His His Ile Pro Ser Lys Phe Ile Pro Phe Glu
355 360 365
Asp Trp Ile Ser Gly Val His Lys Asp Ser Gln Gly Phe Asn Leu Ile
370 375 380
Lys Thr Leu Pro Ile Asn Tyr Arg Pro Pro Ser Asn Met Gly Ile Ala
385 390 395 400
Ile Pro Leu Thr Asp Asn Phe Tyr His Ala Asp Pro Ser Lys Pro Ile
405 410 415
Pro Arg Asn Met Phe His Met Ser Lys Lys Thr Gly Lys Phe Lys Gln
420 425 430
Cys Ala Asn Val Ser Thr Arg Glu Glu Cys Asn Cys Thr Lys Asp Gln
435 440 445
Lys Phe Ser His Ala Val Ala Phe Ser Asp Cys Arg Glu Lys Val Pro
450 455 460
Arg Phe Lys Phe Pro Ile Thr Gln Tyr Pro Val Ser Leu Glu Ile Ile
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Asn Glu Asp Gly Arg Val Pro Leu Gln Ser Pro Tyr Leu Val Thr Val
485 490 495
Thr Glu Val Asn Met Arg His Asn Trp Lys Leu Lys His Thr Val Pro
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Glu Asn Ile Lys Arg Met Lys Gln Leu Val Glu Pro Ile Leu Gly Ala
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Pro Gly His Thr Leu Ile Ala Val Ala Thr Ala Val Val Leu Gly Gly
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<212> DNA
<213> Homo sapiens

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<400> 18859

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     50                  55                  60
His Pro Glu Tyr Leu Gln Pro Leu Ser Ser Thr Pro Val Ser Pro Ile
 65                  70                  75                  80
Glu Leu Asp Ala Lys Lys Ser Pro Leu Ala Leu Leu Ala Gln Thr Cys
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Ser Gln Ile Gly Lys Pro Asp Pro Pro Pro Ser Ser Lys Leu Asn Ser
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Ser Thr Ser Ser Ser Ser Ser Ser Ser Pro Gly Asp Lys Ala Gly Phe
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Arg Val Pro Ser Ala Ala Cys Pro Pro Phe Pro Pro His Gly Ala Pro
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Val Ser Ala Ser Ser Ser Ser Ser Ser Pro Gly Gly Ser Arg Gly Gly
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Ser Pro His His Ser Asp Cys Lys Asn Gly Gly Gly Val Gly Gly Gly
225                 230                 235                 240
Glu Leu Asp Lys Lys Asp Gln Glu Pro Lys Pro Ser Pro Glu Pro Ala
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Ala Val Ser Arg Gly Gly Gly Gly Glu Pro Gly Ala His Gly Gly Ala
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Val Tyr Pro Gly His Pro Leu Gln Pro Ala Ala Leu Ser Ser Ser Ala
            420                 425                 430
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<212> DNA
<213> Homo sapiens

<400> 18860

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<212> DNA
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<212> PRT
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35 40 45
Leu Pro Pro Gly Pro Val Leu Asn Ala Asn Thr Val Cys Leu Thr Leu
50 55 60
Pro Gly Leu Ser Arg Arg Gln Met Glu Val Cys Val Arg His Pro Asp
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Gln His Gln Phe Arg Asp Gln Arg Trp Asn Cys Ser Ser Leu Glu Thr

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Val Ser Asn Ala Cys Ala Leu Gly Lys Leu Lys Ala Cys Gly Cys Asp
145                 150                 155                 160
Ala Ser Arg Arg Gly Asp Glu Glu Ala Phe Arg Arg Lys Leu His Arg
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Leu Gln Leu Asp Ala Leu Gln Arg Gly Lys Gly Leu Ser His Gly Val
            180                 185                 190
Pro Glu His Pro Ala Leu Pro Thr Ala Ser Pro Gly Leu Gln Asp Ser
        195                 200                 205
Trp Glu Trp Gly Gly Cys Ser Pro Asp Met Gly Phe Gly Glu Arg Phe
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Ser Lys Asp Phe Leu Asp Ser Arg Glu Pro His Arg Asp Ile His Ala
225                 230                 235                 240
Arg Met Arg Leu His Asn Asn Arg Val Gly Arg Gln Ala Val Met Glu
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Asn Met Arg Arg Lys Cys Lys Cys His Gly Thr Ser Gly Ser Cys Gln
            260                 265                 270
Leu Lys Thr Cys Trp Gln Val Thr Pro Glu Phe Arg Thr Val Gly Ala
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Arg Asn Gly Gly Gln Leu Glu Pro Gly Pro Ala Gly Ala Pro Ser Pro
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Val Tyr Phe Glu Lys Ser Pro Asp Phe Cys Glu Arg Glu Pro Arg Leu
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Ser Asp Gly Cys Gly Ser Met Cys Cys Gly Arg Gly His Asn Ile Leu
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Arg Gln Thr Arg Ser Glu Arg Cys His Cys Arg Phe His Trp Cys Cys
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<212> DNA
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<212> PRT
<213> Homo sapiens

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Glu Glu Glu Thr Leu Gly Thr Cys Glu Glu Trp Ile Glu Ser Glu Glu
    50                  55                  60
Asp Asp Tyr Ser Leu Lys Asn Thr Ser Gln Leu Thr Gln Cys Ser Leu
65                  70                  75                  80
Glu Thr Leu Ser Glu Val Leu Thr Lys Ile Arg Gln Glu Leu Gln Thr
                85                  90                  95
Asn Ser Glu Asp Cys Asn Gly Lys Asp Thr Gly Ser Leu Leu Leu Leu
            100                 105                 110
Asn Val Asn Asn Asn Met Thr Thr Glu Asn Leu Lys Glu Lys Ser Pro
        115                 120                 125
Phe Arg Glu Thr Thr Gly Ser Ser Ser His Ala Ser Glu Pro Thr Pro
    130                 135                 140
Gln Ala Ala Ala Leu Asp Thr Glu Gly Ser Ser Pro Ile Ser Gly Met
145                 150                 155                 160
Pro Gln Asn Glu Asn Pro Gln Ser Arg Pro Glu Ala Arg Ser Asp Ala
                165                 170                 175
Gly Arg Gln Thr Asp Gly Gly Glu Glu Asp Leu Pro Glu Pro Val Glu
            180                 185                 190
Pro Ser Ala Leu Cys Ser Asp Ser Val Met Glu Pro Ser Ile Glu Gln
        195                 200                 205
Ser Ser Asn Cys Glu Ala Glu Thr Thr Phe Gln Cys Gln Ile Ala Thr
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Val Thr Ser Glu Val Ile Asn Val Leu Ile Asn Lys Asp Gln Asn Leu
225                 230                 235                 240
Val Ile Glu Lys Gly Asp Asn Trp Thr Ile Ile Ser Gly Val Ala Val
                245                 250                 255
Leu Pro His Val Asp Gln Val Thr Leu Cys Asp Ile Pro Gly Asp Ile
            260                 265                 270
Pro Ile Ser Gln Asp Gln Gly Glu Leu Glu Ala Gly Cys Ile Pro Val
        275                 280                 285
Thr Ser Ala Glu Lys Ser Pro Glu Ala Ser His Thr Gly Pro Ala Phe
    290                 295                 300
Gln Glu Ala Pro Cys Gly Asn Asn Leu Ser Cys Pro Gln Glu Asp Val
305                 310                 315                 320
Ser Ser Ser Gly Arg Ser Thr Asn Phe Asp Lys Ser Arg Leu Arg Asn
                325                 330                 335
Arg Pro Val Lys Pro Ser Ile Trp Ile Ser Ser Gln Ile Tyr Asp Gln
            340                 345                 350
Asn Phe Glu Thr Gln Ile Val Ala Ser Asp His Thr Tyr Tyr Asn Ser
        355                 360                 365
Lys Leu Glu Pro Ser Gly Lys Asn Lys Asn Arg Ser Lys Ile Ser Asn
    370                 375                 380
Lys Asp Gln Ser Asn Lys Pro Val Lys Thr Ser Ala Ser Ser Arg Val
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Asp Thr Ser Thr Pro Thr Asp Cys Ser Pro Asp Thr Leu Ser Lys Ile
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Arg Gln Glu Val Gly Pro Pro Leu Pro Pro Leu Leu Ala Pro Leu Ile
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Arg Leu Asp Thr Gly Ser Pro Glu Pro Glu Thr Arg Gly Val Thr Ala
675 680 685
Glu Gly Ile His Lys Asn Leu Pro Gly Asn Leu Pro Pro Ala Glu Val
690 695 700
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705 710 715 720
Val Ser Gln Leu Pro Leu Ser Pro Lys Glu Thr Val Glu Ser His Asp
725 730 735
Lys Ala Ile Ala Asn Val Leu Lys Lys Ile Ala Glu Phe Ser Phe Asp
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755 760 765
Lys Pro Val Met Arg Asp Gln Glu Lys Glu Val Val Tyr Glu Phe Ser

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Glu Leu Lys Ile Gln Lys Ile Ser Met Asp His Asn Tyr Ile His Ala
                805                 810                 815
Leu Cys Arg Val Tyr Val Gly Ile Cys Arg Gln Leu Gly Asp Leu Glu
            820                 825                 830
Arg Ala Arg Leu Phe Cys Tyr Ser Leu Leu Lys Glu Asp Phe Pro Glu
        835                 840                 845
Ser Glu Lys Leu Thr Leu Phe Ile Ala Asn Met Trp His Asp Ile Phe
    850                 855                 860
Leu Ser Gln Ser Val Ile Asn Lys Ala Met Gln Leu Val Ala Arg Gln
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Arg Ala Lys Gly Glu Val Leu Asn Cys Leu Arg Ala Phe Leu Asn Trp
                885                 890                 895
Glu Lys Asn Ala Pro Val Asp Val Gly Phe Met Val Ser Lys Leu Leu
            900                 905                 910
Leu Thr Ile Gln Leu Cys Pro Lys Thr Glu Phe Gln Pro Ser Glu Lys
        915                 920                 925
Phe Gly Glu Asp Leu Ser Asp Asn Ile Trp Glu Tyr Ile Phe Ala Ile
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Asp Leu Leu Cys Cys His Gln Lys Trp Ile Trp Thr His Asp Asn Ile
945                 950                 955                 960
Ile Ser Lys Glu Leu Trp Pro Val Met Asp Lys Trp Ile Lys Tyr Arg
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Lys Gly His Ala Asn Ile Ala Tyr Thr Pro Asp Ile Ile Ile Ala Ser
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Phe Pro Ser Ala Val Lys Asn Ile Ser Ser Val Ile Gly Met Phe Ile
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Gln His Ala His Asp Glu Asp Ile Pro Trp Gly Ile Gln Leu Ala Ala
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Val Tyr Ala Leu Cys Asp Leu Ser Pro Ser Asn Pro Ala Glu Ile Ser
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Lys Ile Leu Glu Ala Trp Arg Arg Glu Ala Ser Lys Ser Val Pro Ser
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<212> DNA
<213> Homo sapiens

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<222> (524)..(2167)

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<211> 548
<212> PRT
<213> Homo sapiens

<400> 18920

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             20                  25                  30
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         35                  40                  45
Leu Arg Gln Asp Ile Thr Phe Phe Asp Ala Asn Lys Thr Gly Gln Leu
     50                  55                  60
Val Ser Arg Leu Thr Thr Asp Val Gln Glu Phe Lys Ser Ser Phe Lys
 65                  70                  75                  80
Leu Val Ile Ser Gln Gly Leu Arg Ser Cys Thr Gln Val Ala Gly Cys
                 85                  90                  95
Leu Val Ser Leu Ser Met Leu Ser Thr Arg Leu Thr Leu Leu Leu Met
            100                 105                 110
Val Ala Thr Pro Ala Leu Met Gly Val Gly Thr Leu Met Gly Ser Gly
        115                 120                 125
Leu Arg Lys Leu Ser Arg Gln Cys Gln Glu Gln Ile Ala Arg Ala Met
    130                 135                 140
Gly Val Ala Asp Glu Ala Leu Gly Asn Val Arg Thr Val Arg Ala Phe
145                 150                 155                 160
Ala Met Glu Gln Arg Glu Glu Glu Arg Tyr Gly Ala Glu Leu Glu Ala
                165                 170                 175
Cys Arg Cys Arg Ala Glu Glu Leu Gly Arg Gly Ile Ala Leu Phe Gln
            180                 185                 190
Gly Leu Ser Asn Ile Ala Phe Asn Cys Met Val Leu Gly Thr Leu Phe
        195                 200                 205
Ile Gly Gly Ser Leu Val Ala Gly Gln Gln Leu Thr Gly Gly Asp Leu
    210                 215                 220
Met Ser Phe Leu Val Ala Ser Gln Thr Val Gln Arg Ser Met Ala Asn
225                 230                 235                 240
Leu Ser Val Leu Phe Gly Gln Val Val Arg Gly Leu Ser Ala Gly Ala
                245                 250                 255
Arg Val Phe Glu Tyr Met Ala Leu Asn Pro Cys Ile Pro Leu Ser Gly
            260                 265                 270
Gly Cys Cys Val Pro Lys Glu Gln Leu Arg Gly Ser Val Thr Phe Gln
        275                 280                 285
Asn Val Cys Phe Ser Tyr Pro Cys Arg Pro Gly Phe Glu Val Leu Lys
    290                 295                 300
Asp Phe Thr Leu Thr Leu Pro Pro Gly Lys Ile Val Ala Leu Val Gly
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Gln Ser Gly Gly Gly Lys Thr Thr Val Ala Ser Leu Leu Glu Arg Phe
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    370                 375                 380
Gly Lys Leu Glu Ala Ser Asp Glu Glu Val Tyr Thr Ala Ala Arg Glu
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Ala Asn Ala His Glu Phe Ile Thr Ser Phe Pro Glu Gly Tyr Asn Thr
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Val Val Gly Glu Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Gln Arg
            420                 425                 430
Leu Ala Ile Ala Arg Ala Leu Ile Lys Gln Pro Thr Val Leu Ile Leu
        435                 440                 445
Asp Glu Ala Thr Ser Ala Leu Asp Ala Glu Ser Glu Arg Val Val Gln
    450                 455                 460
Glu Ala Leu Asp Arg Ala Ser Ala Gly Arg Thr Val Leu Val Ile Ala
465                 470                 475                 480
His Arg Leu Ser Thr Val Arg Gly Ala His Cys Ile Val Val Met Ala
                485                 490                 495
Asp Gly Arg Val Trp Glu Ala Gly Thr His Glu Glu Leu Leu Lys Lys
            500                 505                 510
Gly Gly Leu Tyr Ala Glu Leu Ile Arg Arg Gln Ala Leu Asp Ala Pro
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<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (320)..(1165)

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cagcacctgt gctacagcca tgtcactcct ggcgaccctg gggctggagc tggacagggc 360
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0952945.0072800

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<212> PRT
<213> Homo sapiens

<400> 18922

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			20					25					30		
Ala	Pro	Ala	Pro	Leu	Ala	Pro	Tyr	Glu	Val	Leu	Gly	Gly	Ala	Leu	Glu
		35					40					45			
Gly	Gly	Leu	Pro	Val	Gly	Gly	Glu	Pro	Leu	Ala	Gly	Asp	Gly	Phe	Ser
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Asp	Trp	Met	Thr	Glu	Arg	Val	Asp	Phe	Thr	Ala	Leu	Leu	Pro	Leu	Glu
65					70					75					80
Pro	Pro	Leu	Pro	Pro	Gly	Thr	Leu	Pro	Gln	Pro	Ser	Pro	Thr	Pro	Pro
				85					90					95	
Asp	Leu	Glu	Ala	Met	Ala	Ser	Leu	Leu	Lys	Lys	Glu	Leu	Glu	Gln	Met
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Glu	Asp	Phe	Phe	Leu	Asp	Ala	Pro	Pro	Leu	Pro	Pro	Pro	Ser	Pro	Pro
		115					120					125			
Pro	Leu	Pro	Pro	Pro	Pro	Leu	Pro	Pro	Ala	Pro	Ser	Leu	Pro	Leu	Ser
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Leu	Leu	Ala	Ile	Tyr	Cys	Arg	Asn	Glu	Ala	Gly	Gln	Glu	Glu	Val	Gly
				165					170					175	
Met	Pro	Pro	Leu	Pro	Pro	Pro	Gln	Gln	Pro	Pro	Pro	Pro	Ser	Pro	Pro
			180					185					190		
Gln	Pro	Ser	Arg	Leu	Ala	Pro	Tyr	Pro	His	Pro	Ala	Thr	Thr	Arg	Gly
		195					200					205			

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Asp Arg Lys Gln Lys Lys Arg Asp Gln Asn Lys Ser Ala Ala Leu Arg
210 215 220
Tyr Arg Gln Arg Lys Arg Ala Glu Gly Glu Ala Leu Glu Gly Glu Cys
225 230 235 240
Gln Gly Leu Glu Ala Arg Asn Arg Glu Leu Lys Glu Arg Ala Glu Ser
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0038450 - 0038450

<210> 18923
<211> 3711
<212> DNA
<213> Homo sapiens

<220>
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<222> (10)..(3201)

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<213> Homo sapiens

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Ser Asp Asp Glu Thr Glu Glu Ser Val Lys Phe Lys Arg Leu His Lys
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Leu Val Asn Ser Thr Arg Arg Val Arg Lys Lys Leu Ile Arg Val Glu
                 85                  90                  95
Glu Met Lys Lys Pro Ser Thr Glu Gly Gly Glu Glu His Val Phe Glu
            100                 105                 110
Asn Ser Pro Val Leu Asp Glu Arg Ser Ala Leu Tyr Ser Gly Val His
        115                 120                 125
Lys Lys Pro Leu Phe Phe Asp Gly Ser Pro Glu Lys Pro Pro Glu Asp
    130                 135                 140
Asp Ser Asp Ser Leu Thr Thr Ser Pro Ser Ser Ser Ser Leu Asp Thr
145                 150                 155                 160
Trp Gly Ala Gly Arg Lys Leu Val Lys Thr Phe Ser Lys Gly Glu Ser
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Arg Gly Leu Ile Lys Pro Pro Lys Lys Met Gly Thr Phe Phe Ser Tyr
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Pro Glu Glu Glu Lys Ala Gln Lys Val Ser Arg Ser Leu Thr Glu Gly
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Glu Met Lys Lys Gly Leu Gly Ser Leu Ser His Gly Arg Thr Cys Ser
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Phe Gly Gly Phe Asp Leu Thr Asn Arg Ser Leu His Val Gly Ser Asn
225                 230                 235                 240
Asn Ser Asp Pro Met Gly Lys Glu Gly Asp Phe Val Tyr Lys Glu Val
                245                 250                 255
Ile Lys Ser Pro Thr Ala Ser Arg Ile Ser Leu Gly Lys Lys Val Lys
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Ser Val Lys Glu Thr Met Arg Lys Arg Met Ser Lys Lys Tyr Ser Ser
        275                 280                 285
Ser Val Ser Glu Gln Asp Ser Gly Leu Asp Gly Met Pro Gly Ser Pro
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Pro Pro Ser Gln Pro Asp Pro Glu His Leu Asp Lys Pro Lys Leu Lys
305                 310                 315                 320
Ala Gly Gly Ser Val Glu Ser Leu Arg Ser Ser Leu Ser Gly Gln Ser
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Ser Met Ser Gly Gln Thr Val Ser Thr Thr Asp Ser Ser Thr Ser Asn
            340                 345                 350
Arg Glu Ser Val Lys Ser Glu Asp Gly Asp Asp Glu Glu Pro Pro Tyr
        355                 360                 365
Arg Gly Pro Phe Cys Gly Arg Ala Arg Val His Thr Asp Phe Thr Pro
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Ser Pro Tyr Asp Thr Asp Ser Leu Lys Leu Lys Lys Gly Asp Ile Ile
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Asp Glu Glu Lys Pro Lys Arg Pro Thr Arg Arg Arg Arg Lys Gly Arg
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Pro Pro Gln Pro Lys Ser Val Glu Asp Leu Leu Asp Arg Ile Asn Leu
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Lys Glu His Met Pro Thr Phe Leu Phe Asn Gly Tyr Glu Asp Leu Asp
465 470 475 480
Thr Phe Lys Leu Leu Glu Glu Glu Asp Leu Asp Glu Leu Asn Ile Arg
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Asp Pro Glu His Arg Ala Val Leu Leu Thr Ala Val Glu Leu Leu Gln
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Glu Tyr Asp Ser Asn Ser Asp Gln Ser Gly Ser Gln Glu Lys Leu Leu
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Val Asp Ser Gln Gly Leu Ser Gly Cys Ser Pro Arg Asp Ser Gly Cys
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Tyr Glu Ser Ser Glu Asn Leu Glu Asn Gly Lys Thr Arg Lys Ala Ser
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Arg Asn Gln Leu Gly Asn Tyr Pro Thr Leu Pro Leu Met Lys Ser Gly
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Glu Val Thr Glu Pro Pro Pro Gln Ile Val Pro Glu Val Pro Gln Lys
675 680 685
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Gln Lys Leu Thr Thr Lys Lys Leu Glu Gly Ser Ile Ala Ala Ser Gly
725 730 735
Arg Gly Leu Ser Pro Pro Gln Cys Leu Pro Arg Asn Tyr Asp Ala Gln
740 745 750
Pro Pro Gly Ala Lys His Gly Leu Ala Arg Thr Pro Leu Glu Gly His
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Arg Lys Gly His Glu Phe Glu Gly Thr His His Pro Leu Gly Thr Lys
770 775 780
Glu Gly Val Asp Ala Glu Gln Arg Met Gln Pro Lys Ile Pro Ser Gln
785 790 795 800

0950450 - 07/2800

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Ala Pro Gly Ser Pro Pro Ser Thr Arg Pro Pro Pro Trp Leu Ser Glu
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Leu Thr Glu Asn Lys Leu His Ala Glu Gly Ile Asp Leu Thr Glu Glu
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Pro Tyr Ser Asp Lys His Gly Arg Cys Gly Ile Pro Glu Ala Leu Val
    930                 935                 940
Gln Arg Tyr Ala Glu Asp Leu Asp Gln Pro Glu Arg Asp Val Ala Ala
945                 950                 955                 960
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Ala Ile Pro Ser Gly Gly Leu Thr Glu Ile Cys Arg Lys Pro Val Ser
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Pro Gly Cys Ile Ser Ser Val Ser Asp Trp Leu Ile Ser Ile Gly Leu
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Pro Met Tyr Ala Gly Thr Leu Ser Thr Ala Gly Phe Ser Thr Leu Ser
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Gln Val Pro Ser Leu Ser His Thr Cys Leu Gln Glu Ala Gly Ile Thr
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<212> PRT
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Phe Pro Leu Glu Pro Ala Pro Thr Leu Gly Leu Phe Ser Asn Tyr Ser
35 40 45
Thr Met Asp Pro Val Gln Lys Ala Val Leu Ser His Thr Phe Gly Gly

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0002356565.070200

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Pro Leu Leu Lys Thr Lys Arg Pro Val Ile Ser Cys Asn Ile Cys Gln
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Ile Arg Phe Asn Ser Gln Ser Gln Ala Glu Ala His Tyr Lys Gly Asn
                 85                  90                  95
Arg His Ala Arg Arg Val Lys Gly Ile Glu Ala Ala Lys Thr Arg Gly
            100                 105                 110
Arg Glu Pro Gly Val Arg Glu Pro Gly Asp Pro Ala Pro Pro Gly Ser
        115                 120                 125
Thr Pro Thr Asn Gly Asp Gly Val Ala Pro Arg Pro Gly Thr Lys His
    130                 135                 140
Lys Thr Ile Leu Glu Ala Arg Ser Gly Leu Gly Pro Ile Lys Ala Tyr
145                 150                 155                 160
Pro Arg Leu Gly Pro Pro Thr Pro Gly Glu Pro Glu Ala Pro Ala Gln
                165                 170                 175
Asp Arg Thr Phe His Cys Glu Ile Cys Asn Val Lys Val Asn Ser Glu
            180                 185                 190
Val Gln Leu Lys Gln His Ile Ser Ser Arg Arg His Arg Asp Gly Val
        195                 200                 205
Ala Gly Lys Pro Asn Pro Leu Leu Ser Arg His Lys Lys Ser Arg Gly
    210                 215                 220
Ala Gly Glu Leu Ala Gly Thr Leu Thr Phe Ser Lys Glu Leu Pro Lys
225                 230                 235                 240
Ser Leu Ala Gly Gly Leu Leu Pro Ser Pro Leu Ala Val Ala Ala Val
                245                 250                 255
Met Ala Ala Ala Ala Gly Ser Pro Leu Ser Leu Arg Pro Ala Pro Ala
            260                 265                 270
Ala Pro Leu Leu Gln Gly Pro Pro Ile Thr His Pro Leu Leu His Pro
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Ala Pro Gly Pro Ile Arg Thr Ala His Gly Pro Ile Leu Phe Ser Pro
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305
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<211> 4171
<212> DNA
<213> Homo sapiens

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<211> 2345
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (206)..(2044)

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<212> PRT
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Met Leu Gln Lys Glu Asn Leu Pro Gly Arg Arg Ala Gln Arg Asp Arg
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Arg Ala Ala Gly Asn Arg His Ile Glu Asn Gln Leu Gly Val Ser Phe
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Gln Ser His Leu Pro Glu Leu Gln Gln Phe Gln Arg Glu Gly Lys Ile
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Tyr Glu Tyr Asn Gln Val Glu Lys Ser Pro Asn Asn Arg Gly Lys His
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Tyr Lys Cys Asp Glu Cys Gly Lys Val Phe Ser Gln Asn Ser Arg Leu
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Thr Ser His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Gln Cys Asn
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Val Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys

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Tyr Lys Cys Lys Glu Cys Gly Lys Cys Phe Thr Gln Asn Ser His Leu
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Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser Met
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Phe Lys Cys Asn Glu Cys Val Lys Val Phe Thr Gln Tyr Ser His Leu
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Glu Cys Gly Lys Ala Phe Ser Val Arg Ser Ser Leu Thr Thr His Gln
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Val Phe Thr Gln Asn Ser His Leu Ala Ser His Arg Gly Ile His Ser
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            420                 425                 430
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Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser Val His Ser Ser Leu
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Thr Ile His Gln Thr Ile His Thr Gly Gln Lys Pro Tyr Lys Cys Asn
465                 470                 475                 480
Asp Cys Gly Lys Val Phe Arg His Asn Ser Tyr Leu Ala Ile His Gln
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<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 18931

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65					70					75					80
Ser	Ala	Leu	Phe	Val	Ser	Leu	Ser	Asp	Leu	Gln	Arg	Pro	Pro	Phe	Ser
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			100					105					110		
Arg	Ser	Leu	Arg	Pro	Leu	Arg	Phe	Cys	Ser	Thr	Ala	Arg	Leu	Pro	His
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Thr	Arg	Leu	Ser	Leu	Gln	Ala	Pro	Arg	Val	Pro	Ser	Ala	Ser	Leu	Ala
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<210> 18932

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<212> DNA
<213> Homo sapiens

<220>
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<212> PRT
<213> Homo sapiens

<400> 18933

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             20                  25                  30
Lys Lys Trp Phe Pro Tyr Leu Leu Val Arg Phe Thr Val Ile Tyr Asn
         35                  40                  45
Glu Gln Met Ala Ser Lys Lys Arg Glu Leu Phe Ser Asn Leu Gln Glu
     50                  55                  60
Phe Ala Gly Pro Ser Gly Lys Leu Ser Leu Leu Glu Val Gly Cys Gly
 65                  70                  75                  80
Thr Gly Ala Asn Phe Lys Phe Tyr Pro Pro Gly Cys Arg Val Thr Cys
                 85                  90                  95
Ile Asp Pro Asn Pro Asn Phe Glu Lys Phe Leu Ile Lys Ser Ile Ala
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Glu Asn Arg His Leu Gln Phe Glu Arg Phe Val Val Ala Ala Gly Glu
        115                 120                 125
Asn Met His Gln Val Ala Asp Gly Ser Val Asp Val Val Val Cys Thr
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Leu Val Leu Cys Ser Val Lys Asn Gln Glu Arg Ile Leu Arg Glu Val
145                 150                 155                 160
Cys Arg Val Leu Arg Pro Gly Gly Ala Phe Tyr Phe Met Glu His Val
                165                 170                 175
Ala Ala Glu Cys Ser Thr Trp Asn Tyr Phe Trp Gln Gln Val Leu Asp
            180                 185                 190
Pro Ala Trp His Leu Leu Phe Asp Gly Cys Asn Leu Thr Arg Glu Ser
        195                 200                 205
Trp Lys Ala Leu Glu Arg Ala Ser Phe Ser Lys Leu Lys Leu Gln His
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<212> DNA
<213> Homo sapiens

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<222> (122)..(733)

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<211> 204

<212> PRT
<213> Homo sapiens

<400> 18935

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Glu Lys Tyr Asp Pro Lys Thr Gln Glu Trp Ser Phe Leu Pro Ser Ile
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Cys Leu Asp Tyr Thr Ala Asp Glu Asp Gly Val Trp Tyr Ser Val Ala
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Pro Met Asn Val Arg Arg Gly Leu Ala Gly Ala Thr Thr Leu Gly Asp
            100                 105                 110
Met Ile Tyr Val Ser Gly Gly Phe Asp Gly Ser Arg Arg His Thr Ser
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Met Glu Arg Tyr Asp Pro Asn Ile Asp Gln Trp Ser Met Leu Gly Asp
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Met Gln Thr Ala Arg Glu Gly Ala Gly Leu Val Val Ala Ser Gly Val
145                 150                 155                 160
Ile Tyr Cys Leu Gly Gly Tyr Asp Gly Leu Asn Ile Leu Asn Ser Val
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<222> (206)..(619)

<400> 18936

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Phe Leu Cys Ser Lys Ala Gln Ser Val Thr Val Val Ala Phe Leu Val
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Ala Arg Leu Leu Ala Thr Leu Ala Thr His Gln Met Thr Ser His Thr
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Glu Gly Leu Arg Lys Gly Gly Gly Arg Lys Asp Thr Gln Leu Met Lys
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Gly Gln Cys Ser Ala Ile Lys Val Ile Phe Trp Pro Gly Cys Leu Pro
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Gln Pro Arg Met His Ser Arg Leu His Ile Arg Ser Ile Asn Lys Gly

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<212> PRT
<213> Homo sapiens

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35 40 45
Leu Leu Lys Glu Thr Glu Asp Gly His Glu Ser Pro Leu Phe Asp Phe
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Ile Glu Ser Cys Leu Arg Asn Lys His Glu Met Val Ile Tyr Glu Ala
65 70 75 80
Ala Ser Ala Ile Ile His Leu Pro Asn Cys Thr Ala Arg Glu Leu Ala
85 90 95
Pro Ala Val Ser Val Leu Gln Leu Phe Cys Ser Ser Pro Lys Pro Ala
100 105 110
Leu Arg Tyr Ala Ala Val Arg Thr Leu Asn Lys Val Ala Met Lys His
115 120 125
Pro Ser Ala Val Thr Ala Cys Asn Leu Asp Leu Glu Asn Leu Ile Thr
130 135 140
Asp Ser Asn Arg Ser Ile Ala Thr Leu Ala Ile Thr Thr Leu Leu Lys
145 150 155 160
Thr Gly Ser Glu Ser Ser Val Asp Arg Leu Met Lys Gln Ile Ser Ser
165 170 175
Phe Val Ser Glu Ile Ser Asp Glu Phe Lys Val Val Val Val Gln Ala
180 185 190
Ile Ser Ala Leu Cys Gln Lys Tyr Pro Arg Lys His Ser Val Met Met
195 200 205
Thr Phe Leu Ser Asn Met Leu Arg Asp Asp Gly Gly Phe Glu Tyr Lys
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Arg Ala Ile Val Asp Cys Ile Ile Ser Ile Val Glu Glu Asn Pro Glu
225 230 235 240
Ser Lys Glu Ala Gly Leu Ala His Leu Cys Glu Phe Ile Glu Asp Cys

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        290                 295                 300
Leu Ala Lys Phe Gly Ala Gln Asn Glu Ser Leu Leu Pro Ser Ile Leu
305                 310                 315                 320
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                325                 330                 335
Arg Ala Thr Phe Tyr Leu Asn Val Leu Gln Gln Arg Gln Met Ala Leu
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Asn Ala Thr Tyr Ile Phe Asn Gly Leu Thr Val Ser Val Pro Gly Met
        355                 360                 365
Gly Lys Ala Leu His Gln Tyr Thr Leu Glu Pro Ser Glu Lys Pro Phe
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Asp Met Lys Ser Ile Pro Leu Ala Met Ala Pro Val Phe Glu Gln Lys
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Ala Glu Ile Thr Leu Val Ala Thr Lys Pro Glu Lys Leu Ala Pro Ser
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Arg Gln Asp Ile Phe Gln Glu Gln Leu Ala Ala Ile Pro Glu Phe Leu
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Glu Asp Leu Glu Val Thr Val Ser Asp His Ile Gln Lys Val Leu Lys
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Pro Asn Phe Ala Ala Ala Trp Glu Glu Val Gly Asp Ala Phe Glu Lys
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Glu Glu Thr Phe Ala Leu Ser Ser Thr Lys Thr Leu Val Glu Ala Val
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Lys Val Pro Glu Asn Lys Asn Ser His Ser Leu Tyr Leu Ala Gly Ile
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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

<400> 18942

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Thr Ser His Val Met Ile Ser Arg Arg Gly Thr Tyr Gly Ala Leu Ser
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Val Ala Trp Thr Thr Gly Tyr Ala Pro Gly Leu Glu Ile Pro Glu Phe
65                  70                  75                  80
Ile Val Val Gly Asn Met Thr Pro Thr Leu Gly Ser Leu Ser Phe Ser
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His Gly Glu Gln Arg Lys Gly Val Ser Leu Trp Thr Phe Pro Ser Pro
            100                 105                 110
Gly Trp Pro Glu Ala Phe Val Leu His Leu Ser Gly Val Gln Ser Ser
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Ala Pro Gly Gly Ala Gln Leu Arg Ser Gly Phe Ile Val Ala Glu Ile
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Glu Pro Met Gly Val Phe Gln Phe Ser Thr Ser Ser Arg Asn Ile Ile
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Gly Phe His Ser Asp Leu Ile Lys Val Ser Tyr Gln Thr Thr Ala Gly
            180                 185                 190
Ser Ala Lys Pro Leu Glu Asp Phe Glu Pro Val Gln Asn Gly Glu Leu
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Phe Phe Gln Lys Phe Gln Thr Glu Val Asp Phe Glu Ile Thr Ile Ile
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Asn Asp Gln Leu Ser Glu Ile Glu Glu Phe Phe Tyr Ile Asn Leu Thr
225                 230                 235                 240
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Pro Ser Ile Val Tyr Ile Glu Glu Glu Met Lys Asn Gly Thr Phe Asn
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Thr Ala Glu Val Leu Ile Arg Arg Thr Gly Gly Phe Thr Gly Asn Val
385                 390                 395                 400
Ser Ile Thr Val Lys Thr Phe Gly Glu Arg Cys Ala Gln Met Glu Pro
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Asn Ala Leu Pro Phe Arg Gly Ile Tyr Gly Ile Ser Asn Leu Thr Trp
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Ala Val Glu Glu Glu Asp Phe Glu Glu Gln Thr Leu Thr Leu Ile Phe
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Ile Gly Phe Ser Glu Glu Ser Gln Ser Gly Leu Glu Leu Arg Glu Gly
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Ala Phe Glu Asp Val Lys Val Phe Trp Arg Val Thr Leu Asn Lys Thr
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Ser Val Ser Gly Thr Thr Thr Cys Thr Met Gly Gln Thr Lys Cys Phe
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Ile Ser Ile Glu Leu Lys Pro Glu Lys Val Pro Gln Val Glu Val Tyr
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Phe Phe Val Glu Leu Tyr Glu Ala Thr Ala Gly Ala Ala Ile Asn Asn
    610                 615                 620
Ser Ala Arg Phe Ala Gln Ile Lys Ile Leu Glu Ser Asp Glu Ser Gln
625                 630                 635                 640
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0050950+0050800

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Pro Lys Arg Phe Gln Ile Val Leu Phe Asp Pro Lys Gly Gly Ala Arg
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Arg Ile Ile Pro Gln Thr Ser Leu Cys Leu Leu Trp Asn Gln Ala Ala
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Thr Val Glu Met Asn Gly His Pro Gly Pro Ser Thr Ala Phe Phe Thr
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Pro Gly Ser Gly Met Pro Pro Ala Gly Gly Glu Ile Ser Lys Ser Thr
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Gln Asn Leu Ile Gly Ala Met Glu Glu Val Pro Pro Asp Trp Glu Arg
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Ala Ser Phe Gln Gln Gly Ser Gln Ala Ser Pro Asp Leu Lys Pro Ser
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Pro Gln Asn Gly Ala Thr Phe Pro Ser Ser Gly Gly Tyr Gly Gln Gly
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1410 1415 1420
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<212> PRT
<213> Homo sapiens

<400> 18945

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Asp	Val	Ala	Val	Asn	Phe	Thr	Gln	Glu	Glu	Trp	Ala	Leu	Leu	Gly	Pro
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Ser	Gln	Lys	Ser	Leu	Tyr	Arg	Asp	Val	Met	Trp	Glu	Thr	Ile	Arg	Asn
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Leu	Asp	Cys	Ile	Gly	Met	Lys	Trp	Glu	Asp	Thr	Asn	Ile	Glu	Asp	Gln
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His	Arg	Asn	Pro	Arg	Arg	Ser	Leu	Arg	Cys	His	Ile	Ile	Glu	Arg	Phe
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Ser	Glu	Ser	Arg	Gln	Pro	Asp	Ser	Thr	Val	Asn	Glu	Lys	Pro	Pro	Gly
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Val	Asp	Pro	Cys	Lys	Ser	Ser	Val	Cys	Gly	Glu	Ile	Met	Gly	Cys	Ser
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Phe	Leu	Asn	Cys	Tyr	Ile	Thr	Phe	Asp	Ala	Gly	His	Lys	Pro	Asp	Glu
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Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Lys His Cys Ser Lys
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Gln Arg His Met Ile Arg His Thr Gly Asp Gly Pro His Lys Cys Lys
340 345 350
Ile Cys Gly Lys Gly Phe Asp Cys Pro Ser Ser Leu Gln Ser His Glu
355 360 365
Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Gln Cys Gly Lys
370 375 380
Ala Leu Ser His His Ser Ser Phe Arg Ser His Met Ile Met His Thr
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Gly Asp Gly Pro His Lys Cys Lys Val Cys Gly Lys Ala Phe Ile Tyr
405 410 415
Pro Ser Val Phe Gln Gly His Glu Arg Thr His Thr Gly Glu Lys Pro
420 425 430
Tyr Glu Cys Lys Glu Cys Gly Lys Ala Phe Arg Ile Ser Ser Ser Leu
435 440 445
Arg Arg His Glu Thr Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Lys
450 455 460
Cys Gly Lys Ala Phe Ile Asp Phe Tyr Ser Phe Gln Asn His Glu Thr
465 470 475 480
Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala
485 490 495
Phe Ser Cys Phe Thr Tyr Leu Ser Gln His Arg Arg Thr His Met Ala
500 505 510
Glu Lys Pro Tyr Glu Cys Lys Thr Cys Lys Lys Ala Phe Ser His Phe
515 520 525
Gly Asn Leu Lys Val His Glu Arg Ile His Thr Gly Glu Lys Pro Tyr
530 535 540
Glu Cys Lys Glu Cys Arg Lys Ala Phe Ser Trp Leu Thr Cys Leu Leu
545 550 555 560
Arg His Glu Arg Ile His Thr Gly Lys Lys Ser Tyr Glu Cys Gln Gln
565 570 575
Cys Gly Lys Ala Phe Thr Arg Ser Arg Phe Leu Arg Gly His Glu Lys
580 585 590
Thr His Thr Gly Glu Lys Met His Glu Cys Lys Glu Cys Gly Lys Ala
595 600 605
Leu Ser Ser Leu Ser Ser Leu His Arg His Lys Arg Thr His Trp Arg
610 615 620

0020460.0020800

Asp Thr Leu
625

<210> 18946
<211> 2075
<212> DNA
<213> Homo sapiens

<400> 18946
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gggcagcagg accacgtggc tggcaaggag ctgtttaggg ctgagagcca ggcacctaat 720
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gaaaccagtt gacagtcacc ccccacccca cctttgtcat acaagcctca aaaggccttc 2040
cagcctgggc aacataatga gaccttgtct ctacc 2075

<210> 18947

0052340.0028

<211> 1213
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (20)..(1213)

<400> 18947
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tgaaatctca gagcttcccg tcagaacatg gacccagaca tacaaagaac aagttctaga 180
acccatgttg aatggcaccg agaagacacc tcctctcata acagactata gggaatacca 240
tacagatacc actgtgaaat ttgttgtgaa gatgactgaa gaaaaactgg cagaggcaga 300
gagagttgga ctacacaaag tcttcaaact ccaaactagt ctcacatgca actctatggt 360
gctttttgac cacgtaggct gtttaaagaa atatgacacg gtgttggata ttctaagaga 420
ctttttttgaa ctcagactta aatattatgg attaagaaaa gaatggctcc taggaatgct 480
tggtgctgaa tctgctaaac tgaataatca ggctcgcttt atcttagaga aaatagatgg 540
caaaataatc attgaaaata agcctaagaa agaattaatt aaagttctga ttcagagggg 600
atatgattcg gatcctgtga aggcctggaa agaagcccag caaaaggttc cagatgaaga 660
agaaaatgaa gagagtgaca acgaaaagga aactgaaaag agtgactccg taacagattc 720
tggaccaacc ttcaactatc ttcttgatat gcccctttgg tatttaacca aggaaaagaa 780
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gagtccatca gatttgtgga aagaagactt ggctacattt attgaagaat tggaggctgt 900
tgaagccaag gaaaaacaag atgaacaagt cggacttcct gggaaagggg ggaaggccaa 960
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acgaataacc atagaaatga aagcagaggc agaaaagaaa aataaaaaga aaattaagaa 1080
tgaaaatact gaaggaagcc ctcaagaaga tggtgtggaa ctagaaggcc taaaacaaag 1140
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atttaagcca atc 1213

<210> 18948
<211> 398
<212> PRT
<213> Homo sapiens

<400> 18948
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Pro Asn Gln Tyr Val Ile Ser Gly Glu Val Ala Ile Leu Asn Ser Thr
20 25 30
Thr Ile Glu Ile Ser Glu Leu Pro Val Arg Thr Trp Thr Gln Thr Tyr
35 40 45
Lys Glu Gln Val Leu Glu Pro Met Leu Asn Gly Thr Glu Lys Thr Pro
50 55 60
Pro Leu Ile Thr Asp Tyr Arg Glu Tyr His Thr Asp Thr Thr Val Lys
65 70 75 80

0056046.0002

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Phe Val Val Lys Met Thr Glu Glu Lys Leu Ala Glu Ala Glu Arg Val
                 85                  90                  95
Gly Leu His Lys Val Phe Lys Leu Gln Thr Ser Leu Thr Cys Asn Ser
            100                 105                 110
Met Val Leu Phe Asp His Val Gly Cys Leu Lys Lys Tyr Asp Thr Val
        115                 120                 125
Leu Asp Ile Leu Arg Asp Phe Phe Glu Leu Arg Leu Lys Tyr Tyr Gly
    130                 135                 140
Leu Arg Lys Glu Trp Leu Leu Gly Met Leu Gly Ala Glu Ser Ala Lys
145                 150                 155                 160
Leu Asn Asn Gln Ala Arg Phe Ile Leu Glu Lys Ile Asp Gly Lys Ile
                165                 170                 175
Ile Ile Glu Asn Lys Pro Lys Lys Glu Leu Ile Lys Val Leu Ile Gln
            180                 185                 190
Arg Gly Tyr Asp Ser Asp Pro Val Lys Ala Trp Lys Glu Ala Gln Gln
        195                 200                 205
Lys Val Pro Asp Glu Glu Glu Asn Glu Glu Ser Asp Asn Glu Lys Glu
    210                 215                 220
Thr Glu Lys Ser Asp Ser Val Thr Asp Ser Gly Pro Thr Phe Asn Tyr
225                 230                 235                 240
Leu Leu Asp Met Pro Leu Trp Tyr Leu Thr Lys Glu Lys Lys Asp Glu
                245                 250                 255
Leu Cys Arg Leu Arg Asn Glu Lys Glu Gln Glu Leu Asp Thr Leu Lys
            260                 265                 270
Arg Lys Ser Pro Ser Asp Leu Trp Lys Glu Asp Leu Ala Thr Phe Ile
        275                 280                 285
Glu Glu Leu Glu Ala Val Glu Ala Lys Glu Lys Gln Asp Glu Gln Val
    290                 295                 300
Gly Leu Pro Gly Lys Gly Gly Lys Ala Lys Gly Lys Lys Thr Gln Met
305                 310                 315                 320
Ala Glu Val Leu Pro Ser Pro Arg Gly Gln Arg Val Ile Pro Arg Ile
                325                 330                 335
Thr Ile Glu Met Lys Ala Glu Ala Glu Lys Lys Asn Lys Lys Lys Ile
            340                 345                 350
Lys Asn Glu Asn Thr Glu Gly Ser Pro Gln Glu Asp Gly Val Glu Leu
        355                 360                 365
Glu Gly Leu Lys Gln Arg Leu Glu Lys Lys Gln Lys Arg Glu Pro Gly
    370                 375                 380
Thr Lys Thr Lys Lys Gln Thr Thr Leu Ala Phe Lys Pro Ile
385                 390                 395
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<210> 18949
<211> 1958
<212> DNA
<213> Homo sapiens

<220>

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<221> CDS
<222> (565)..(1032)

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gaaccggaag aaacgaaggg ctcgtccgct tcggcttgtc ctaatttggt gcccaatctg 240
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aagggctctc taccccgctc ggagcataga tggtaccgtc cggaagtccg ggcggagacc 480
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cacaacaagc cggaagtgga agtcaggagt agcaaagagc tcctgttaca acctgtgacc 720
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gaacgtttga tgggactctc ccttatgcag gcccagaact cttcttgggc catggatacc 1860
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ccctgccatt ttatgagcag aactgtaagg atatactg 1958

<210> 18950
<211> 156
<212> PRT
<213> Homo sapiens

<400> 18950
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Gln Ala Ala Leu Cys Leu Glu Asn Phe Ser Ser Gln Val Val Glu Arg

09625469-070800

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            20                  25                  30
His Asn Lys Pro Glu Val Glu Val Arg Ser Ser Lys Glu Leu Leu Leu
        35                  40                  45
Gln Pro Val Thr Ile Ser Arg Asn Gly Lys Glu Lys Val Leu Ile Glu
    50                  55                  60
Gly Ser Ile Asn Ser Val Arg Val Ser Ile Ala Val Lys Gln Ala Asp
65                  70                  75                  80
Glu Ile Glu Lys Ile Leu Cys His Lys Leu Asn Ser Ala Gly Trp Pro
                85                  90                  95
Arg Ala Ala Ser Arg Thr Cys Leu Ser Ser Leu Gly Leu Asp Gly Arg
            100                 105                 110
Asp Thr Arg Ala Trp Thr Ser Val Phe Cys Ser Leu Pro Gln Leu Ser
        115                 120                 125
Ala Pro Val Gln Gln Leu His Pro Glu Ala Pro Gly Glu Leu Met Pro
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145                 150                 155
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<210> 18951
<211> 1512
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (188)..(1102)

<400> 18951

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cccgcggacc gccgcgcgag tccgaggtgt gaccgccgcg gctccggact ggccccggga 1020
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cccttccttc tggaactcag tttagcgtct gaaccttggg gaggtggaac aagttgctgc 1140
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<210> 18952
<211> 305
<212> PRT
<213> Homo sapiens

<400> 18952

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		20					25					30			
Gln	Val	Ile	Ala	Arg	Arg	Gln	Glu	Pro	Ala	Leu	Arg	Gly	Ser	Pro	Gly
	35					40					45				
Pro	Leu	Thr	Pro	His	Pro	Cys	Asn	Glu	Leu	Gly	Pro	Pro	Ala	Ser	Pro
50					55					60					
Arg	Thr	Pro	Arg	Pro	Val	Arg	Arg	Gly	Ser	Gly	Arg	Arg	Leu	Pro	Arg
65				70					75					80	
Pro	Asp	Ser	Leu	Ile	Phe	Tyr	Arg	Gln	Gln	Gly	Phe	Gly	Glu	Gln	Arg
			85					90					95		
Glu	Arg	Gln	Gly	Pro	Gly	Ser	Gly	Ala	Ala	Pro	Leu	Ser	Gly	Cys	Pro
		100					105					110			
Ala	Gly	Arg	Cys	Pro	Glu	Gln	Pro	Gly	Leu	His	Arg	Ala	Thr	Cys	Gly
	115					120					125				
Phe	Arg	Gly	Leu	Gly	Cys	Ala	Pro	Gly	Cys	Pro	Gly	Ser	Gly	Gly	Lys
130					135					140					
Ala	Gly	Ala	Val	Ser	His	Val	Leu	Ala	Ala	Pro	Val	Gly	Glu	Gly	Ala
145				150					155					160	
Leu	Leu	Gln	Leu	Leu	Arg	Pro	Gly	Ala	Arg	Ala	Gly	Gly	Gly	Ala	Gly
			165					170					175		
Arg	Arg	Ala	Leu	Leu	Pro	Ala	Glu	Leu	Gly	Ser	Arg	Arg	Gln	Pro	Ala
		180					185					190			
Gly	Arg	Asn	Phe	Ala	Ala	Ala	Arg	Leu	Arg	Gly	Arg	Gln	Arg	Leu	Asp
	195					200					205				
Ile	Gln	Arg	Gln	Gly	Arg	Gly	Gln	Pro	Gly	Arg	Arg	Gly	Arg	Arg	Arg
210					215					220					
Arg	Leu	Gly	Gly	Ser	Gly	Leu	Gly	Ala	Gly	Pro	Ala	Pro	Pro	Gly	Val
225				230					235					240	
Gly	Gly	Gly	Ala	Gln	Arg	Ala	Arg	His	Pro	Val	Ala	Val	Arg	Leu	Pro
			245					250					255		
Ala	Arg	Pro	Arg	Thr	Ala	Ala	Arg	Val	Arg	Gly	Val	Thr	Ala	Ala	Ala

0050946 0050946

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Pro Asp Trp Pro Arg Asp Trp Pro Arg Ala Arg Lys Arg Thr Pro Leu
        275                 280                 285
Phe Trp Arg Ala Gly Cys Leu Cys Val Ser Pro Ser Phe Trp Asn Ser
    290                 295                 300
Val
305
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<210> 18953
<211> 1955
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1229)..(1573)

<400> 18953

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0050260.0047800

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<210> 18954
<211> 115
<212> PRT
<213> Homo sapiens

<400> 18954
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Arg Ala Lys Leu Leu Leu Pro Arg His Ser Gly Leu Pro Ser Gly Cys
35 40 45
Val Ser Thr Leu Gly His Met Pro Val Ala Tyr Val Trp Val Thr Ser
50 55 60
Val Thr Leu Gly Pro Leu His Ile Glu Gly Arg Cys Val Phe Leu Trp
65 70 75 80
Lys Asp Gly Arg Thr Glu Gly Lys Glu Arg Gln Ser Gly Thr Thr Ala
85 90 95
Leu Phe Leu Pro Trp His Leu Glu Gly Thr Arg Tyr Pro Gly Asp Cys
100 105 110
Ser Trp Leu
115

<210> 18955
<211> 1817
<212> DNA
<213> Homo sapiens

<400> 18955
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Lys His Phe Thr Lys Glu Leu Lys Ala Thr Thr Ala Arg Cys Gly Leu
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Cys Leu Ser Cys Gly Val Gly Cys Lys Lys Ser Met Asn His Gly Lys
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Glu Gly Val Pro His Glu Ala Lys Ser Arg Cys Arg Tyr Ser His Gln
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Glu Val Ser Val Val Pro Lys Thr Ser Ala Ser Thr Asp Ser Pro Trp
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Met Gly Leu Ala Lys Tyr Ala Trp Ser Gly Tyr Val Ile Glu Cys Pro
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Asn Cys Gly Val Val Tyr Arg Ser Arg Gln Tyr Trp Phe Gly Asn Gln
        515                 520                 525
Asp Pro Val Asp Thr Val Val Arg Thr Glu Ile Val His Val Trp Pro
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Gly Pro Thr Lys Ala Val Thr Ser Trp Leu Thr Asp Gln Ile Ala Pro
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Ala Tyr Trp Arg Pro Asn Ser Gln Ile Leu Ser Cys Asn Lys Cys Ala
        595                 600                 605
Thr Ser Phe Lys Asp Asn Asp Thr Lys His His Cys Arg Ala Cys Gly
    610                 615                 620
Glu Gly Phe Cys Asp Ser Cys Ser Ser Lys Thr Arg Pro Val Pro Glu
625                 630                 635                 640
Arg Gly Trp Gly Pro Ala Pro Val Arg Val Cys Asp Asn Cys Tyr Glu
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Ala Arg Asn Val Gln Leu Ala Val Thr Glu Ala Gln Val Asp Asp Glu
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Gly Gly Thr Leu Ile Ala Arg Lys Val Gly Glu Ala Val Gln Asn Thr
        675                 680                 685
Leu Gly Ala Val Val Thr Ala Ile Asp Ile Pro Leu Gly Leu Val Lys
    690                 695                 700
Asp Ala Ala Arg Pro Ala Tyr Trp Val Pro Asp His Glu Ile Leu His
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Cys His Asn Cys Arg Lys Glu Phe Ser Ile Lys Leu Ser Lys His His
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<213> Homo sapiens

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35 40 45
Tyr Lys Asn Val Val Gly Ala Arg Arg Ser Ser Trp Arg Val Ile Ser
50 55 60
Ser Ile Glu Gln Lys Thr Ser Ala Asp Gly Asn Glu Lys Lys Ile Glu
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Met Val Arg Ala Tyr Arg Glu Lys Ile Glu Lys Glu Leu Glu Ala Val
85 90 95
Cys Gln Asp Val Leu Ser Leu Leu Asp Asn Tyr Leu Ile Lys Asn Cys

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Thr Val Val Glu Ser Ser Glu Lys Ala Tyr Ser Glu Ala His Glu Ile
145                 150                 155                 160
Ser Lys Glu His Met Gln Pro Thr His Pro Ile Arg Leu Gly Leu Ala
                165                 170                 175
Leu Asn Tyr Ser Val Phe Tyr Tyr Glu Ile Gln Asn Ala Pro Glu Gln
            180                 185                 190
Ala Cys His Leu Ala Lys Thr Ala Phe Asp Asp Ala Ile Ala Glu Leu
        195                 200                 205
Asp Thr Leu Asn Glu Asp Ser Tyr Lys Asp Ser Thr Leu Ile Met Gln
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Thr Leu Leu Ser Ser Ala Gln Pro Glu Thr Arg Val Ser Tyr Trp Thr

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                 85                  90                  95
Leu Asp Phe Ala Gly Val Tyr Ser Ala Leu Arg Ala Leu Lys Gly Arg
            100                 105                 110
Glu Lys Pro Ala Ala Pro Thr Ala Gln Lys Ser Leu Ser Ser Leu Gln
        115                 120                 125
Leu Asp Ser Ser Asp Pro Ser Val Thr Ser Pro Leu Asp Trp Leu Glu
    130                 135                 140
Glu Gly Ile His Trp Gln Tyr Ser Pro Pro Asp Leu Lys Leu Glu Leu
145                 150                 155                 160
Lys Ala Lys Gly Ser Ala Leu Asp Pro Ala Ala Gln Ala Phe Leu Leu
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Glu Gln Gln Leu Trp Gly Val Glu Leu Leu Pro Ser Ser Leu Gln Ser
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Arg Leu Tyr Ser Asn Arg Glu Leu Gly Ser Ser Pro Ser Gly Pro Leu
        195                 200                 205
Asn Ile Gln Arg Ile Asp Asp Phe Ser Val Val Ser Tyr Leu Leu Asn
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Pro Ser Tyr Leu Asp Cys Phe Pro Arg Leu Glu Val Ser Tyr Gln Asn
225                 230                 235                 240
Ser Asp Gly Asn Ser Glu Val Val Gly Phe Gln Thr Leu Thr Pro Glu
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Ser Ser Cys Leu Arg Glu Asp His Cys His Pro Gln Pro Leu Ser Ala
            260                 265                 270
Glu Leu Ile Pro Ala Ser Trp Gln Gly Cys Pro Pro Leu Ser Thr Glu
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Gly Leu Pro Glu Ile His His Leu Arg Met Lys Arg Leu Glu Phe Leu
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Gln Gln Ala Ser Lys Gly Gln Asp Leu Pro Thr Pro Asp Gln Asp Asn
305                 310                 315                 320
Gly Tyr His Ser Leu Glu Glu Glu His Ser Leu Leu Arg Met Asp Pro
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Lys His Cys Arg Asp Asn Pro Thr Gln Phe Val Pro Ala Ala Gly Asp
            340                 345                 350
Ile Pro Gly Asn Thr Gln Glu Ser Thr Glu Glu Lys Ile Glu Leu Leu
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Cys Pro Ser Ser Glu Ile Pro Met Glu Lys Glu Pro Gly Glu Gly Arg
385                 390                 395                 400
Ile Ser Val Val Asp Tyr Ser Tyr Leu Glu Gly Asp Leu Pro Ile Ser
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Ala Ser Ser Asp Leu Glu Thr Ser Ser Asp Pro Glu Gly Glu Asp Trp
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Gln Thr Ala Ala Arg Ile Val Pro Glu Glu Pro Ser Asp Ser Glu Lys
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Asp Leu Ser Gly Lys Ser Asp Leu Glu Asn Ser Ser Gln Ser Gly Ser
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Thr Ser Gly Glu Asn Glu Lys Gly Cys Arg Asp Ser Lys Thr Pro Ser
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Glu Ser Ile Val Ala Ile Ser Glu Cys His Thr Leu Leu Ser Cys Lys
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Val Gln Leu Leu Gly Ser Gln Glu Ser Glu Cys Pro Asp Ser Val Gln
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Arg Asp Val Leu Ser Gly Gly Arg His Thr His Val Lys Arg Lys Lys
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Val Thr Phe Leu Glu Glu Val Thr Glu Tyr Tyr Ile Ser Gly Asp Glu
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Asp Arg Lys Gly Pro Trp Glu Glu Phe Ala Arg Asp Gly Cys Arg Phe
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Gln Lys Arg Ile Gln Glu Thr Glu Asp Ala Ile Gly Tyr Cys Leu Thr
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Phe Glu His Arg Glu Arg Met Phe Asn Arg Leu Gln Gly Thr Cys Phe
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<212> DNA
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<220>
<221> CDS
<222> (439)..(2043)

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<213> Homo sapiens

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Arg His Leu Asn Asp Leu Leu Glu Asp Arg Lys Ile Leu Ala Gln Asp
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0962946.07280

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<222> (134)..(1369)

<400> 18973

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Val Met Cys Leu Asp Leu Ala Ala Ser Trp Met Lys Cys Pro Leu Asp
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Arg Ala Tyr Leu Ile Lys Leu Ser Gly Leu Asn Lys Glu Thr Tyr Gln
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35 40 45
Gln Ala Gly Val Gln Arg Arg Ala Leu Gly Ser Leu Gln Pro Pro Pro
50 55 60
Pro Trp Phe Lys Arg Phe Ser Cys Leu Ser Pro Leu Ser Met Phe Asn
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Pro His Thr Phe Lys Cys Met Glu Gly Leu Thr Leu Lys Arg Asn Pro
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